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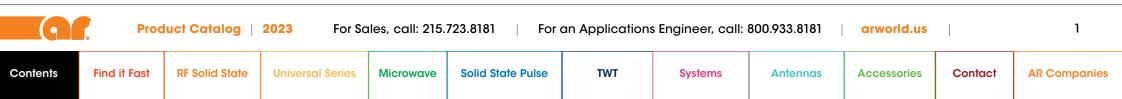


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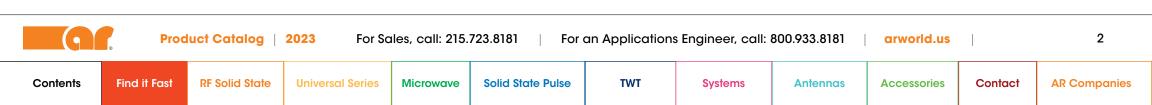
Total Solutions

From complete testing systems to software, AR is your one-stop for RF and EMC testing. Our testing solutions are built to last and come with the product quality and high-level support customers can expect from AR.

Throughout this catalog, you will find everything you need for RF and EMC testing. Use the table below to quickly find some of our more popular items.

#	Component	Page
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Find it Fast Table

Amplifiers

Frequency	Power (W)	Model Number	Category	Page
4 kHz – 400 MHz	100	100A400AM20	RF Solid State	11
10 kHz – 100 MHz	150	150A100D	RF Solid State	11
10 kHz – 225 MHz	1200	1200A225B	RF Solid State	12
10 kHz – 225 MHz	2500	2500A225C	RF Solid State	12
10 kHz – 225 MHz	5000	5000A225C	RF Solid State	13
10 kHz – 225 MHz	10000	10000A225B	RF Solid State	13
10 kHz – 250 MHz	25	25A250B	RF Solid State	14
10 kHz – 250 MHz	50	50A250	RF Solid State	14
10 kHz – 250 MHz	125	125A250	RF Solid State	15
10 kHz – 250 MHz	500	500A250D	RF Solid State	15
10 kHz – 400 MHz	100	100A400A	RF Solid State	16
10 kHz – 400 MHz	175	175A400	RF Solid State	16
10 kHz – 400 MHz	250	250A400	RF Solid State	17
10 kHz – 400 MHz	350	350A400	RF Solid State	17
10 kHz – 400 MHz	600	600A400	RF Solid State	18
10 kHz- 400 MHz	1000	1000A400	RF Solid State	18
10 kHz – 1000 MHz	1	1U1000	Universal	26
10 kHz – 1000 MHz	2.5	2.5U1000	Universal	26
10 kHz – 1000 MHz	5	501000	Universal	27
10 kHz – 1000 MHz	10	10U1000	Universal	27



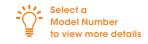
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Frequency	Power (W)	Model Number	Category	Page
10 kHz – 1000 MHz	25	25U1000	Universal	28
10 kHz – 1000 MHz	50	50U1000	Universal	28
10 kHz – 1000 MHz	100	100U1000A	Universal	29
10 kHz – 1000 MHz	250	250U1000A	Universal	29
100 kHz – 1000 MHz	500	500U1000	Universal	30
50 –1000 MHz	50	50W1000D	RF Solid State	19
80 – 1000 MHz	125	125W1000A	RF Solid State	19
80 – 1000 MHz	150	150W1000B	RF Solid State	20
80 – 1000 MHz	250	250W1000C	RF Solid State	20
80 – 1000 MHz	500	500W1000C	RF Solid State	21
80 – 1000 MHz	800	800W1000	RF Solid State	21
80 – 1000 MHz	1000	1000W1000H	RF Solid State	22
80 – 1000 MHz	2000	2000W1000E	RF Solid State	22
80 – 1000 MHz	3000	3000W1000B	RF Solid State	23
80 – 1000 MHz	4000	4000W1000B	RF Solid State	23
80 – 1000 MHz	6000	6000W1000	RF Solid State	24
80 – 1000 MHz	10000	10000W1000A	RF Solid State	24
0.7 - 6 GHz	15	15\$1G6	Microwave	32
0.7 - 6 GHz	30	30S1G6	Microwave	32
1 – 6 GHz	30	30\$1G6C	Microwave	33
0.7 - 6 GHz	60	60\$1G6	Microwave	33
1 – 6 GHz	75	75\$1G6C	Microwave	34

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Amplifiers

Frequency	Power (W)	Model Number	Category	Page
0.7 - 6 GHz	125	125\$1G6	Microwave	34
1 – 6 GHz	125	125\$1G6C	Microwave	35
0.7 - 6 GHz	250	250\$1G6	Microwave	35
1 - 6 GHz	250	250\$1G6C	Microwave	36
0.7 - 6 GHz	350	350S1G6A	Microwave	36
0.7 – 6 GHz	500	500\$1G6A	Microwave	37
1 – 6 GHz	500	500\$1G6C	Microwave	37
1 – 6 GHz	750	750\$1G6C	Microwave	38
1 – 6 GHz	1000	1000\$1G6C	Microwave	38
0.8 – 2.5 GHz	1000	1000SP0z8G2z5	Pulse	45
0.8 – 2.5 GHz	2000	2000SP0z8G2z5	Pulse	45
0.8 – 2.5 GHz	4000	4000SP0z8G2z5	Pulse	46
0.8 – 2.5 GHz	8000	8000SP0z8G2z5	Pulse	46
1 – 2 GHz	1300	1300SP1G2	Pulse	47
1 – 2 GHz	2000	2000SP1G2	Pulse	47
1 – 2 GHz	4000	4000SP1G2	Pulse	48
1 – 2 GHz	8000	8000SP1G2	Pulse	48
1 - 2.8 GHz	2000	2000\$1G2z8	Microwave	39
1 - 2.5 GHz	125	125\$1G2z5	Microwave	39
1 - 2.5 GHz	250	250\$1G2z5B	Microwave	40
1 - 2.5 GHz	500	500\$1G2z5A	Microwave	40
1 - 2.5 GHz	1000	1000\$1G2z5B	Microwave	41

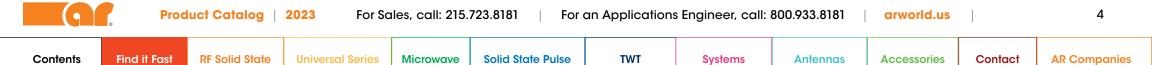


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Frequency	Power (W)	Model Number	Category	Page
1.2 - 1.4 GHz	4000	4000SP1z2G1z4	Pulse	49
1.2 - 1.4 GHz	6000	6000SP1z2G1z4	Pulse	49
1.2 - 1.4 GHz	9000	9000SP1z2G1z4	Pulse	50
1.2 - 1.4 GHz	12000	12000SP1z2G1z4	Pulse	50
1.2 - 1.4 GHz	18000	18000SP1z2G1z4	Pulse	51
2 - 4 GHz	1000	1000SP2G4	Pulse	51
2 - 4 GHz	2000	2000SP2G4	Pulse	52
2 – 4 GHz	4000	4000TP2G4	тwт	66
2 – 4 GHz	5000	5000SP2G4	Pulse	52
2 - 4 GHz	7000	7000SP2G4	Pulse	53
2 – 4 GHz	6900	6900TP2G4	тwт	67
2 - 4 GHz	10000	10000SP2G4	Pulse	53
2.5 - 7.5 GHz	300	300T2G8	тwт	57
2.5 - 7.5 GHz	500	500T2G8	тwт	57
2.5 - 7.5 GHz	1000	1000T2G8B	тwт	60

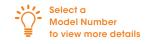
Antennas

Accessories



Amplifiers

Frequency	Power (W)	Model Number	Category	Page
2.5 - 7.5 GHz	1700	1500T2G8A	тwт	58
2.5 - 7.5 GHz	2000	2000TP2G8B	тwт	67
2.7 - 3.1 GHz	4000	4000SP2z7G3z1	Pulse	54
2.7 - 3.1 GHz	8000	8000SP2z7G3z1	Pulese	54
2.7 - 3.1 GHz	8000	8000TP2z7G3z1	тwт	68
2.7 - 3.1 GHz	12000	12000SP2z7G3z1	Pulse	55
4 - 8 GHz	200	200T4G8	тwт	59
4 - 8 GHz	4000	4000TP4G8	тwт	68
4 - 8 GHz	7400	7400TP4G8	тwт	69
1.2 - 1.4 GHz 2.7 - 3.1 GHz	1500/1000	1500/1000SP1z2G3z1	Pulse	55
6 - 18 GHz	20	20\$6G18C	Microwave	41
6 - 18 GHz	40	40\$6G18C	Microwave	42
6 - 18 GHz	75	75S6G18C	Microwave	42
6 - 18 GHz	125	125\$6G18C	Microwave	43
6 - 18 GHz	250	250\$6G18C	Microwave	43
6 - 18 GHz	250	250T6G18	тwт	59
6 - 18 GHz	500	500T6G18	тwт	60
7.5 - 18 GHz	250	250T8G18	тwт	60
7.5 - 18 GHz	500	500T8G18	тwт	61
7.5 - 18 GHz	1000	1000T8G18B	тwт	61
7.5 - 18 GHz	1000	1000TP8G18	тwт	69
7.5 - 18 GHz	1500	1500T8G18	тwт	62



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Frequency	Power (W)	Model Number	Category	Page
7.5 - 18 GHz	2000	2000TP8G18	тwт	70
8 - 12 GHz	4000	4000TP8G12	тwт	70
8 - 12 GHz	8300	8300TP8G12	тwт	71
8 - 12 GHz	20000	20000TP8G12	тwт	71
12 - 18 GHz	3000	3000TP12G18	тwт	72
12 - 18 GHz	5700	5700TP12G18	тwт	72
18 - 26.5 GHz	40	40T18G26A	тwт	62
18 - 26.5 GHz	130	130T18G26z5B	тwт	63
18 - 26.5 GHz	200	200T18G26z5A	тwт	63
26.5 - 40 GHz	40	40T26G40A	тwт	64
26.5 - 40 GHz	130	130T26z5G40B	тwт	64
26.5 - 40 GHz	200	200T26z5G40A	тwт	65
40 - 50 GHz	70	70T40G50	тwт	65
40 - 50 GHz	100	100T40G50	тwт	66



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IEC 61000-4-3 Predefined System	ns	
3 V/m field strength with up to a 3 meter test distance from 80 MHz - 6 GHz	SSIEC3V3M	74
10 V/m field strength with up to a 2 meter test distance from 80 MHz - 6 GHz	SSIEC10V2M	74
10 V/m field strength with up to a 3 meter test distance from 80 MHz - 6 GHz	SSIEC10V3M	74
30 V/m field strength with up to a 2 meter test distance from 80 MHz - 6 GHz	SSIEC30V2M	74
30 V/m field strength with up to a 3 meter test distance from 80 MHz - 6 GHz	SSIEC30V3M	75

ISO 11451-2 Predefined Systems

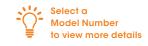
50 V/m field strength for full vehicle testing from 10 kHz - 18 GHz	SSISOV50V10K18G	75
50 V/m field strength for full vehicle testing from 20 MHz - 18 GHz	SSISOV50V20M18G	75
100 V/m field strength for full vehicle testing from 10 kHz - 18 GHz	SSISOV100V10K18G	75
100 V/m field strength for full vehicle testing from 20 MHz – 18 GHz	SSISOV100V20M18G	76
200 V/m field strength for full vehicle testing from 10 kHz - 18 GHz	SSISOV200V10K18G	76
200 V/m field strength for full vehicle testing from 30 MHz – 18 GHz	SSISOV200V30M18G	76

ISO 11452-2 Predefined Systems

50 V/m field strength for vehicle component testing from 10 kHz – 18 GHz	SSISOC50V10K18G	76
50 V/m field strength for vehicle component testing from 80 MHz – 18 GHz	SSISOC50V80M18G	77
100 V/m field strength for vehicle component testing from 10 kHz - 18 GHz	SSISOC100V10K18G	77
100 V/m field strength for vehicle component testing from 80 MHz – 18 GHz	SSISOC100V80M18G	77
200 V/m field strength for vehicle component testing from 10 kHz - 18 GHz	SSISOC200V10K18G	77
200 V/m field strength for vehicle component testing from 80 MHz - 18 GHz	SSISOC200V80M18G	78

2023

Universal Series



Find it Fast Table

AR Predefined Test Systems Make Testing Easy

We have complete standard and custom test systems that perform entire RF & EMC tests with just the press of a few buttons. Everything you need - amplifiers, antennas, couplers, signal generators, system controllers, receivers, and more, along with the software to control it - all in one comprehensive system.

Your System, Your Way

AR is here for you at each step to ensure that the system design, integration, and support of your test system complies with your goals. AR has designed hundreds of EMC systems that vary in scope from a single, less complex rack of equipment for low field strength IEC 61000-4-3 testing to MIL-STD-461/464 test systems. Spanning from DC - 50 GHz, producing field strengths in excess of 4,000 V/m and everything in between AR Systems are in compliance with military, aviation, commercial and automotive test standards.

AR's Predefined Systems are designed to meet the minimum requirements of several of today's common EMC test standards. Depending on your needs, these systems can be used as is or tailored and customized to meet your specific requirements. Additionally, AR could also design a system that meets your needs from scratch.

AR Quality Backed by AR Protection

One of the added benefits of an AR test system is peace of mind. Every product in your AR test system is designed and built to the highest quality standards and backed by the most comprehensive warranty in the business and a global support network. When you have a question about any part of the system, you can call us. We've been here for over 50 years, and we'll continue to be here, serving your needs and engineering the products that meet tomorrow's challenges.

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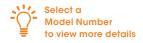
AR Companies

Systems

Description	Model Number	Page
MIL-STD-461 Predefined System	ns	
10 V/m field strength for military testing applications from 10 kHz – 18 GHz	SSMIL10V10K18G	78
10 V/m field strength for military testing applications from 2 MHz – 18 GHz	SSMIL10V2M18G	78
50 V/m field strength for military testing applications from 10 kHz – 18 GHz	SSMIL50V10K18G	78
50 V/m field strength for military testing applications from 2 MHz – 18 GHz	SSMIL50V2M18G	79
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Multi-Tone RF Radiated Immunity System, 2 Tones	MT2IEC10V3M	81
Multi-Tone RF Radiated Immunity System, 4 Tones	MT4IEC10V3M	82

Multi-Tone Testing

The MT4IEC10V3M (Multi-Tone Test System) is a state-of-the-art system that is designed to run RF Radiated Immunity tests faster than ever before. By testing multiple frequencies (tones) at once, test times are reduced by a factor equivalent to the number of tones selected. The number of tones is only limited by the number of signal generators and the size of the amplifier used with the system.



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Antennas

Frequency Range	
10 kHz – 50 GHz	1

Power Range W - 20 kW

Select a

Model Number

to view more details

Find it Fast Table

Frequency	Power (W)	Model Number	Page		
	Log-Periodic				
26 – 250 MHz	1Hz 15000 ATR26M250		84		
26 MHz - 1 GHz	20000	ATR26M1G	84		
26 MHz - 6 GHz	5000	ATR26M6G	85		
26 MHz - 6 GHz	5000	ATR26M6G-1	85		
80 MHz - 1 GHz	5000	ATL80M1G	86		
80 MHz - 6 GHz	5000	ATR80M6G	86		
150 MHz – 1 GHz	5000	ATL150M1G	87		
200 MHz - 2 GHz	300	LP1	87		
200 MHz - 3 GHz	250	LP3	87		
200 MHz - 6 GHz	200	LP6	87		
200 MHz - 6 GHz	5000	ATR200M6G	88		
700 MHz - 7.5 GHz	1200	ATT700M8G	88		
700 MHz - 12 GHz	600	ATT700M12G	89		
30 – 2 MHz	See Graphs	JB1	89		
30 – 3 MHz	See Graphs	JB3	89		
30 – 6 MHz	See Graphs	JB6	89		
	Horn				
200 MHz - 1 GHz	5000 ATH200M1G		90		
200 MHz - 1 GHz	10000	ATH200M1G-1	90		
200 MHz - 2 GHz	1000	ATH200M2G	90		

Frequency	Power (W)	Model Number	Page
400 MHz - 1 GHz	4700	ATH400M1G	91
800 MHz - 6 GHz	2300	ATH800M6G	92
1 - 18 GHz	300	DRH-118	92
2 – 10 GHz	700	ATH2G10	93
4 - 8 GHz	1200	ATH4G8	93
6 - 8 GHz	3000	ATH6G18A	94
7.5 – 18 GHz	2800	ATH7G18A	94
18 - 26.5 GHz	350	ATH18G27A	95
18 - 26.5 GHz	350	ATH18G27A-1	95
18 - 40 GHz	50	DRH-1840	96
18 - 40 GHz	450	ATH18G40	96
26.5 - 40 GHz	240	ATH26G40A-1	97
26.5 - 40 GHz	400	ATH26G40A	97
33 - 50 GHz	240	ATH33G50	98

Frequency	Power (W)	Model Number	Page	
E-Field Generators				
10 kHz – 25 MHz	3000	ATE10K25M-1	98	
10 kHz – 30 MHz	1000	ATE10K30MA	99	
10 kHz – 100 MHz	500	ATE10K100M	99	
10 kHz – 100 MHz	3000	ATP10K100M	100	
	L			

Biconical				
30 - 300 MHz	1	BC1	101	
30 - 300 MHz	50	BC2	101	
30 - 300 MHz	500	BC5	101	

The antennas you need for virtually any testing procedures are right here at AR. We offer a complete variety of rugged, high power antennas, with expect field generation graphs. Since all are frequency and power matched to AR amplifiers, it's easy to precisely select the suitable unit.

	®

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Product Catalog | 2023

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Universal Series

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Solid State Pulse Microwave

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All our RF solid-state amplifiers have modulation capability that will faithfully reproduce AM, FM or Pulse Modulation appearing on the input signal for use in the most demanding EMC applications. These selfcontained, broadband, completely solid-state amplifiers are designed for applications requiring the ultimate in output power over a wide instantaneous bandwidth with high gain.



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Frequency Range 4 kHz - 1 GHz

Power Range 1 W - 10 kW

TWT

100A400AM20 4 kHz - 400 MHz 100 W CW

Rated Output Power Into 50Ω:



	: 10 W min. rising to 100 W min. at 100 kHz 00 kHz – 400 MHz: 125 W, typ.; 100 W min.
Input for Rated Output	1 milliwatt max.
	mpression Into 50Ω: z: 10 W min. rising to 100 W min. at 100 kHz 00 kHz – 400 MHz: 125 W typ.; 100 W min.
Power Output @ 1 dB Co 4 kHz – 1	mpression Into 50Ω: 20 kHz: 10 W min. rising to 75 W at 100 kHz 100 kHz – 400 MHz: 85 W typ.; 75 W min.
Flatness ±1	dB typ. / ±1.5 dB max, 100 kHz – 400 MHz
Frequency Response	4 kHz-400 MHz instantaneously
Gain 50 dB min.,	(at max. setting) 00 kHz – 400 MHz; <50 dB below 100 kHz
Gain Adjustment (continu	ious range) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance*

100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

Harmonic Distortion

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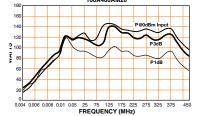
Minus 20 dBc max. at 75 W, Minus 30 dBc typical at 50 W (.01 – 400 MHz)
Minus 73 dBc tvn

RF Solid State

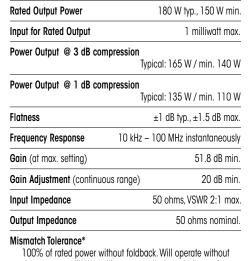
Spurious	Minus 73 dBc typ.
Third Order Intercept Point	55 dBm typ.
Noise Figure	8 dB typ.

Find it Fast

Primary Power	100 – 240 VAC, 50 / 60 Hz, 500 W
Connectors	
RF Input	Type N female
RF Output	Type N female
Remote Interfaces	
IEEE-488	24-pin female
RS-232	9–pin Subminiature D female
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With cabinet	18.5 kg (41 lb.)
Without cabinet	10.4 kg (23 lb.)
Size (WxHxD)	
With cabinet	50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 in
Without cabinet	48.3 x 13.2 x 55.1 cm / 19 x 5.2 x 21.7 in
Export classification	EAR99
100	100A400AM20



150A100D 10 kHz - 100 MHz 150 W CW



damage or oscillation with any magnitude and phase of source and load impedance.

Noise Figure	9 dB typ.
Harmonic Distortion	
	Minus 20 dBc max. at 100 W
	Minus 30 dBc typ. at 70 W
Third Order Intercept Point	55 dBm typ.

•	
Spurious	Minus 73 dBc typ.
Primary Power	100 – 240 VAC

Systems

50/60 Hz

Antennas

500 W



Connectors	
RF Input	Type N female
RF Output	Type N female
Remote Interfaces	
IEEE-488	24–pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With cabinet	18.5 kg (41 lb.)
Without cabinet	10.4 kg (23 lb.)
Size (WxHxD)	
With cabinet	50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 in
Without cabinet	48.3 x 13.2 x 55.1 cm / 19 x 5.2 x 21.7 in.
Export classification	EAR99
250	150A100D
225	
200	
	P@0dBm input
SE 175	P3dB
150	

Exp	oort	clo	issif	icati	on								E
							150A	100	D				
	250												
	225												
	200												
	175		_	\sim		_	P	@0dE	3m in	put			
WATTS						\sim		P3dB					
٤	150			~	-								
>	125						\sim	P1dB			_	_	\sim
	100												
	75												
	50												

.009 0.5 5 15 25 35 45 55 65 75 85 95 105

Contact

FREQUENCY (MHz)

(9)	Proc	duct Catalog	2023 For Sc	ıles, call: 215.7	23.8181	For	an Applications	Engineer, call:	800.933.8181

Microwave

Universal Series

Solid State Pulse



Accessories

11

AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W - 10 kW

1200A225B 10 kHz - 225 MHz 1200 W CW

Rated Output Power	
	p.: 1,350 W, min. 1,200 W, .01 – 100 MHz .: 1,250 W, min. 1,100 W, 100 – 225 MHz
Input for Rated Output	1 milliwatt max.
	ompression p.: 1,350 W, min. 1,200 W, .01 – 100 MHz).: 1,250 W, min. 1,000 W, 100 – 225 MHz
Power Output @ 1 dB c Ty	ompression p.: 1,250 W, min. 1,100 W, .01 – 100 MHz Typ.: 900 W, min. 750 W, 100 – 225 MHz
Flatness	±2 dB typ., ±2.5 dB max.
Frequency Response	10 kHz–225 MHz instantaneously
Gain (small signal)	62 dB min,
Gain Adjustment (contin	nuous range) >20 dB
Input Impedance	50 ohms, VSWR to 2.0:1 max.
Output Impedance	50 ohms nominal
-	

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. Load mismatch above 6:1 may limit output reflected power to 50% of minimum rated power.

Harmonic Distortion

Minus 30 dBc typical, minus	20 dBc maximum at 1000 W
Third Order Intercept Point	72 dBm typ.

Third Order Intercept Point

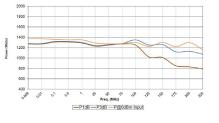
Primary Power

200 - 240 VAC single-phase 50/60 Hz, 4.0 kW



Connectors	
RF Input:	N female
RF Output:	7-16 DIN female
Remote Control	
IEEE-488	24-pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin subminiature D
Cooling Forced air (self–contained	fans)
Weight	23.1 kg (151 lbs)
Size (WxHxD)	
50.3 x 4	47 x 65.3 cm / 19.8 x 18.5 x 25.7 in
Export classification	EAR99

TYPICAL PSAT POWER @ 0dBm INPUT, 1 dBm, 3dBm



2500A225C 10 kHz - 225 MHz 2500 W CW

Rated Output Power	
•	Typ.: 2,800 W, min. 2,500 W, .01 – 100 MHz
	Typ.: 2,300 W, min. 2000 W, 100 – 225 MHz
Input for Rated Outp	t 1 milliwatt max.
Power Output @ 3 d	compression
	Typ.: 2,800 W, min. 2,500 W, .01 – 100 MHz
	Typ.: 2,300 W, min. 2000 W, 100 – 200 MHz
	Typ.: 2000 W, min. 1,800 W, 200 – 225 MHz
Power Output @ 1 d	compression
I .	Typ.: 2,400 W, min. 2000 W, .01 - 100 MHz
	yp.: 1,900 W, min. 1,500 W, 100 – 200 MHz
	yp.: 1,500 W, min. 1,300 W, 200 – 225 MHz
Flatness	±1.5 dB typ., ±2.5 dB max
Frequency Response	10 kHz – 225 MHz instantaneously
Gain (small signal)	64 dB min.
Gain Adjustment (co	tinuous range) 20 dB
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms nomina
Mismatch Tolerance	

Mismatch Tolerance

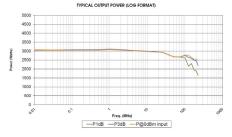
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. Load mismatch above 6:1 may limit output reflected power to 50% of minimum rated power.

Harmonic Distortion @ 1750 W Minus 40 dBc typical, minus 20 dBc maximum at 1,750 W

Third Order Intercept Point 74 dBm typ. Minus 70 dBc typ. Spurious



N female 24–pin female 9–pin subminiature D (female) ST Conn Tx and Rx RS–232 Type E RJ–45 15–pin subminiature D
N female 24–pin female 9–pin subminiature D (female) ST Conn Tx and Rx RS–232 Type E RJ–45 15–pin subminiature D Forced air (self–contained fans)
N female 24–pin female 9–pin subminiature D (female) ST Conn Tx and Rx RS–232 Type E RJ–45 15–pin subminiature D Forced air (self–contained fans)
N female 24–pin female 9–pin subminiature D (female) ST Conn Tx and Rx RS–232 Type E RJ–45 15–pin subminiature D
N female 24–pin female 9–pin subminiature D (female) ST Conn Tx and Rx RS–232 Type E RJ–45
N female 24–pin female 9–pin subminiature D (female) ST Conn Tx and Rx RS–232 Type E
N female 24–pin female 9–pin subminiature D (female) ST Conn Tx and Rx RS–232
N female 24–pin female 9–pin subminiature D (female)
N female 24-pin female
N female
, to Birtholitato
, to Birtholitato
7-16 DIN female
N female
8.0 kW
50/60 Hz



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W - 10 kW

5000A225C 10 kHz - 225 MHz 5000 W CW

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. Load mismatch above 6:1 may limit output reflected power to 50% of minimum rated power.

Harmonic Distortion @ 3750 W	
Minus 30 dBc typ	minus 20 dBc max at 3750 W

winds oo dbe typ., thi	
Third Order Intercept Point	77 dBm typ.
Spurious	Minus 70 dBc typ.



5000

4000

2000

2000

Connectors	
RF Input:	N female
RF Output:	EIA 1–5/8 male, rear
Remote Control	
IEEE-488	24-pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin subminiature D
Forced air (self-contai	ined fans) 295 kg (650 lbs)
Size (WxHxD)	x 181 x 95.5 cm/ 22.6 x 71.25 x 37.6 in.
57.4	x 101 x 95.5 cm/ 22.0 x 71.25 x 57.0 m
Export classification	EAR99
TYPICA	L OUTPUT POWER (LINEAR FORMAT)
10000	
9000	

ተ ው ተ _አው _አው _አው Freq.(MHz)

-P1dB -P3dB -P@0dBm Input

10000A225B 10 kHz - 225 MHz 10000 W CW

Rated Output Power	12500 W
Minimum	10000 W, .01 – 100 MHz, 7000 W, 100 – 225 MHz
Input for Rated Output	1 milliwatt max.
Power Output for 1 dB compressio	
Nominal Minimum	9000 W 10000 W, .01 – 50 MHz, 8000 W, 50 – 100 MHz, 5500 W, 100 – 150 MHz 5000 W, 150 – 225 MHz
Flatness	±2.5 dB max. ±1.5 dB typ
Frequency Response 10	kHz–225 MHz instantaneously
Gain (small signal)	70 dB min.
Gain Adjustment (continuous range	e) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

RF Load Reflected

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. Load mismatch above 6:1 may limit output reflected power to 50% of minimum rated power.

Harmonic Distortion @ 7500 W	Minus 20 dBc max.
Third Order Intercept Point	77 dBm typ.
Primary Power (user must specify)	

200 - 240 VAC, Delta (4 wire) 380 - 415 VAC, Delta (4 wire) 47 – 63 Hz, 3–phasé 35000 W max.



Weight	590 kg (1300 lbs)
Cooling	Forced air (self-contained fans)
Ethernet:	RJ-45
RS-232 (fibe USB 2:	r optic): Type ST Type B
RS-232	9-pin female Type D
Remote Contro IEEE-488	24–pin female on rear panel
Safety Interloc	1 /1 1
RF Sample	Type N female on front panel
RF Output	Type EIA 1–5/8 male on rear panel
Connectors RF Input	Type N female on rear panel



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W – 10 kW

25A250B 10 kHz - 250 MHz 25 W CW

Rated Output Power	35 W typ., 25 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
	Typ. 35 W / min. 25 W
Power Output @ 1 dB compression	
	Typ. 30 W / min. 20 W
Flatness	±1 dB typ./±1.5 dB max.
Frequency Response 10 kH	z–250 MHz instantaneously
Gain (at max. setting)	44 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance*

100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Harmonic Distortion	Minus 20 dBc max. at 20 W, Minus 35 dBc typ. at 15 W
Spurious	Minus 73 dBc typ.
Third Order Intercept Point	55 dBm typ.
Noise Figure	8 dB typ.



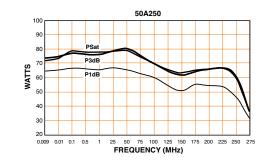
Primary Power								
				FO) VA
				50	/ 0	UH	Z, Z	00 \
Connectors					т.		NI 4-	
RF Input RF Output		Type N female Type N female						
					• ,	po		
Remote Interfaces					24	1–n	in fe	mal
RS-232		9-p	in Su	ıbmir	niat	ure	D fe	mal
Fiber optic USB 2		S	T Co	nn Tx	an	d R)		
USB 2 Ethernet								ype J-4
Safety Interlock			15	i–pin	Su	hmi	niat	
· ·		_		•				
Cooling	Forced air (self-contained fans)							
Weight With cabinet Without cabinet Size (WxHxD) With cabinet Without cabinet	50.3 x 15.5 48.3 x 13		,		8. x (6 k	ğ (1 x 21	
Export classification							E	AR9
	25	5A250B						
55								
50								
	DC	at						
ω ⁴⁵	P3							
S 45 40 40		3dB		-				
AU AU	P							
40 35	P							

50A250 10 kHz - 250 MHz 50 W CW

Rated Output Power	70 W typ., 50 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compr	r ession Typ. 70 W / min. 50 W
Power Output @ 1 dB compr	r ession Typ. 55 W / min. 40 W
Flatness	±1 dB typ./±1.5 dB max
Frequency Response	10 kHz – 250 MHz instantaneously
Gain (at max. setting)	47 dB min.
Gain Adjustment (continuous	range) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nominal
Mismatch Tolerance* 100% of rated power withou damage or oscillation with source and load impedanc	ut foldback. Will operate without any magnitude and phase of ee.
Harmonic Distortion	Minus 20 dBc max. at 40 W Minus 30 dBc typ. at 30 W
Spurious	Minus 73 dBc typ
Third Order Intercept Point	55 dBm typ.
Noise Figure	8 dB typ
Primary Power	100 – 240 VAC 50 / 60 Hz, 250 W



Weight With cabinet Without cabinet Size (WxHxD) With cabinet With cabinet	16.7 kg (37 lb.) 8.6 kg (19 lb.) 50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 in. 48.3 x 13.2 x 55.1 cm / 19 x 5.2 x 21.7 in.
Weight With cabinet	
Cooling	
• "	Forced air (self-contained fans)
Safety Interlock	15-pin Subminiature D
Connectors RF Input RF Output Remote Interfaces IEEE-488 RS-232 Fiber optic USB 2 Ethernet	Type N female Type N female 24–pin female 9–pin Subminiature D female ST Conn Tx and Rx RS–232 Type B RJ–45



	9	®	Product
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Catalog | 2023

Universal Series

For Sales, call: 215.723.8181

FREQUENCY (MHz)

For an Applications Engineer, call: 800.933.8181

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Contents

Find it Fast RF Solid State

Solid State Pulse Microwave

TWT

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Sy	/st	е	m	\$

าร	Antennas

Contact Accessories

AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W - 10 kW

125A250 10 kHz - 250 MHz 125 W CW

Rated Output Power	150 W typ., 125 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	1
	Typical: 145 W / min. 125 W
Power Output @ 1 dB compression	ı
	Typical: 110 W / min. 90 W
Flatness	±1 dB typ., ±1.5 dB max.
Frequency Response	10 kHz – 250 MHz instantaneously
Gain (at max. setting)	50 dB min.
Gain Adjustment (continuous rang	e) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms nominal.

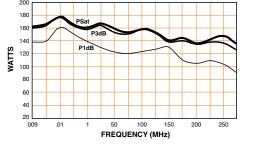
Mismatch Tolerance*

100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

Noise Figure	8 dB typ.
Harmonic Distortion	
	Minus 20 dBc max. at 90 W
	Minus 30 dBc typ. at 70 W
Third Order Intercept Point	55 dBm typ.
Spurious	Minus 73 dBc typ.
Primary Power	
	100 – 240 VAC
	50/60 Hz



Connectors	
RF Input	Type N female
RF Output	Type N female
Remote Interfaces	
IEEE-488	24-pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Type B
Ethernet	ŔĴ–45
Safety Interlock	15-pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With cabinet	18.5 kg (41 lb.)
Without cabinet	10.4 kg (23 lb.)
Size (WxHxD)	
With cabinet	50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 in
Without cabinet	48.3 x 13.2 x 55.1 cm / 19 x 5.2 x 21.7 in
Export classificatio	n EAR99
	125A250
200	
180	

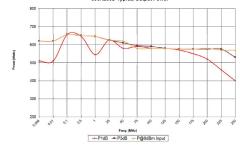


500A250D 10 kHz - 250 MHz 500 W CW

Rated Output Power	
600 W t	yp., 525 W min., .01 – 250 MHz
Power Output @ 3 dB compressi	on
	o., 525 W min., 0.01 – 200 MHz
550 W typ., 4	75 W min., 200 MHz – 250 MHz
Power Output @ 1 dB compressi	on
	o., 475 W min., 0.01 – 200 MHz
425 W typ., 3	75 W min., 200 MHz – 250 MHz
Flatness	±1.5 dB typ., ±2 dB max
Frequency Response 10) kHz–250 MHz instantaneously
Gain (at max. setting)	57.2 dB min
Gain Adjustment (continuous rang	ge) 20 dB min
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms nominal
Mismatch Tolerance*	
Will operate without damage or	oscillation when connected to
any load impedance without the	aid of foldback circuitry.
Noise Figure	7 dB typ
Harmonic Distortion Minus 20 dBc max. at 400 W; <	:-20 dBc typ. at 500 W
Third Order Intercept Point	68 dBm typ



Connectors	
RF Input	Type N female
RF Output	Type N female
RF Sample Ports	Type N female (optional)
Remote Interfaces	
IEEE-488	24-pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	78 kg (171 lb.)
Without Cabinet	58 kg (128 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 38.1 x 75.5 cm / 19.8 x 15 x 29.7 in.
Without Cabinet	48.3 x 35.6 x 75.5 cm / 19 x 14 x 29.7 in.
Export classification	EAR99
	500A250D Typical Output Power
800	



Contact

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ıct Catalog 📗 2023

Universal Series

500 W

For Sales, call: 215.723.8181

For an Applications Engineer, call: 800.933.8181

Spurious

Primary Power

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Contents

Find it Fast

RF Solid State

Solid State Pulse Microwave

TWT

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Sy	st	е	m	S

Antennas	Accessories
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Minus 73 dBc typ.

200 - 240 VAC

50 / 60 Hz, 2,400 W

AR Companies

Frequency Range 10 kHz – 1 GHz Power Range 1 W – 10 kW

100A400A 10 kHz - 400 MHz 100 W CW

Rated Output Power	130 W typ., 100 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
•	Typ. 125 W / min. 100 W
Power Output @ 1 dB compression	
	Typ. 85 W / min. 75 W
Flatness	±1 dB typ./±1.5 dB max.
Frequency Response 10 kH	z–400 MHz instantaneously
Gain (at max. setting)	50 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance*

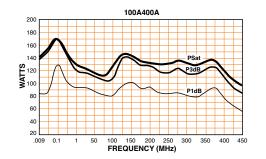
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

Harmonic Distortion

Minus 20 dBc max. at 75 W, Minus 30 dBc typical at 50 W
Minus 73 dBc typ.
55 dBm typ.
8 dB typ.
100 – 240 VAC 50 / 60 Hz, 500 W



Connectors	
RF Input	Type N female
RF Output	Type N female
Remote Interfaces	
IEEE-488	24–pin female
RS-232	9-pin Subminiature D female
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With cabinet	18.5 kg (41 lb.)
Without cabinet	10.4 kg (23 lb.)
Size (WxHxD)	
With cabinet	50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 in.
Without cabinet	48.3 x 13.2 x 55.1 cm / 19.8 x 5.2 x 21.7 in.
Export classificatio	n EAR99



175A400 10 kHz – 400 MHz 175 W CW

Rated Output Power	225 W typ., 175 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compress	ion Typ. 210 W / min. 165 W
Power Output @ 1 dB compressi	on Typ. 165 W / min. 125 W
Flatness	±0.9 dB typ. / ±1.5 dB max
Frequency Response	0 kHz–400 MHz instantaneously
Gain (at max. setting)	52.5 dB min.
Gain Adjustment (continuous rar	nge) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nomina
Mismatch Tolerance* 100% of rated power without damage or oscillation with an source and load impedance.	
Harmonic Distortion	Minus 20 dBc max. at 150 W

60 dBm typ.

8.5 dB typ.

100 – 240 VAC 50 / 60 Hz, 770 W

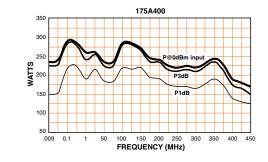
Third Order Intercept Point

Noise Figure

Primary Power



Tuna N famala
Type N female
Type N female
24–pin female
9-pin Subminiature D female
ST Conn Tx and Rx RS-232
Type B
RJ-45
15–pin Subminiature D
Forced air (self-contained fans)
33 kg (73 lb.)
22 kg (48 lb.)
50.3 x 20.5 x 74.9 cm / 19.8 x 8.1 x 29.5 in.
48.3 x 17.7 x 74.9 cm / 19 x 7 x 29.5 in.
EAR99



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W - 10 kW

250A400 10 kHz - 400 MHz 250 W CW

Rated Output Power	325 W typ., 250 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	1
	Typ. 325 W / min. 250 W
Power Output @ 1 dB compression	1
	Typ. 250 W / min. 200 W
Flatness	±1.5 dB typ. / ±2 dB max.
Frequency Response	10 kHz-400 MHz instantaneously
Gain (small signal)	54 dB min.
Gain Adjustment (continuous range	e) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nomina

Mismatch Tolerance*

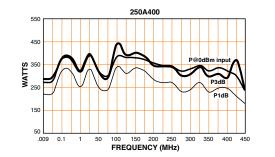
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Harmonic Distortion	
	Minus 20 dBc max. at 250 W
Spurious	Minus 73 dBc typ.
Third Order Intercept Point	65 dBm typ.
Noise Figure	8.5 dB typ.
Primary Power	100 240 \/AC
	100 – 240 VAC

50 / 60 Hz, 1,350 W



Connectors	
RF Input	Type N female
RF Output	Type N female
Remote Interfaces	
IEEE-488	24–pin female
RS-232	9-pin Subminiature D female
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Type B
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With cabinet	45 kg (98 lb.)
Without cabinet	33 kg (73 lb.)
Size (WxHxD)	
With cabinet	50.3 x 20.5 x 74.9 cm / 19.8 x 8.1 x 29.5 in
Without cabinet	48.3 x 17.7 x 74.9 cm / 19 x 7 x 29.5 in
Export Classificatio	on EAR99



350A400 10 kHz - 400 MHz 350 W CW

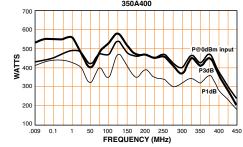
Rated Output Power	425 W typ., 350 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compre	ssion
·	Typ. 400 W / min. 325 W
Power Output @ 1 dB compre	ession
	Typ. 325 W / min. 225 W
Flatness	±1.5 dB typ. / ±2 dB max
Frequency Response	10 kHz–400 MHz instantaneously
Gain (at max. setting)	55.5 dB min.
Gain Adjustment (continuous	range) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max
	50 ohms, nomina

damage or oscillation with any magnitude and phase of source and load impedance.

Harmonic Distortion	
	Minus 20 dBc max. at 300 W
Spurious	Minus 73 dBc typ.
Third Order Intercept Point	65 dBm typ.
Noise Figure	8.5 dB typ.
Primary Power	100 – 240 VAC
	50 / 60 Hz , 1,750 W



Connectors	
RF Input	Type N female
RF Output	Type N female
Remote Interfaces	
IEEE-488	24-pin female
RS-232	9-pin Subminiature D female
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With cabinet	48 kg (104 lb.)
Without cabinet	35 kg (78 lb.)
Size (WxHxD)	
With cabinet	50.3 x 20.5 x 74.9 cm / 19.8 x 8.1 x 29.5 in.
Without cabinet	48.3 x 17.7 x 74.9 cm / 19 x 7 x 29.5 in.
Export Classification	EAR99
	350A400



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W - 10 kW

600A400 10 kHz - 400 MHz 600 W CW

Rated Output Power	
70	0 W typ., 600 W min.; .01 - 250 MHz
600 W t	yp., 525 W min., 250 MHz – 400 MHz
Power Output @ 3 dB comp	ression
65	0 W typ., 600 W min.; .01 - 250 MHz
600 W t	yp., 525 W min., 250 MHz – 400 MHz
Power Output @ 1 dB comp	ression
57	5 W typ., 500 W min.; .01 - 250 MHz
500 W t	yp., 400 W min., 250 MHz – 400 MHz
Flatness	±1.5 dB typ. / ±2 dB max.
Frequency Response	10 kHz-400 MHz instantaneously
Gain (at max. setting)	57.8 dB min.
Gain Adjustment (continuou	ıs range) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
Mismatch Toloranco*	

Mismatch Tolerance*

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Harmonic Distortion Minus 20 dBc maximum at 500 W; <-20 typical at 600 W Spurious Minus 73 dBc typ. Third Order Intercept Point 67 dBm typ. Noise Figure 7.5 dB typ. Primary Power 200 – 240 VAC 50 / 60 Hz, 2,950 W

Find it Fast



Connectors					
RF Input	Type N female				
RF Output	Type 7-16 DIN				
RF Sample Ports:	Type N female (optional)				
Remote Interfaces					
IEEE-488	24–pin female				
RS-232	9–pin Subminiature D female				
Fiber optic	ST Conn Tx and Rx RS-232				
USB 2	Туре В				
Ethernet	RJ-45				
Safety Interlock	15–pin Subminiature D				
Cooling	Forced air (self-contained fans)				
Weight					
With cabinet Without cabinet	87 kg (191 lb.) 68 kg (148 lb.)				
With cabinet Without cabinet Size (WxHxD)	68 kg (148 lb.)				
With cabinet Without cabinet	68 kg (148 lb.) 50.3 x 38.1 x 75.5 cm / 19.8 x 15 x 29.7 in				
With cabinet Without cabinet Size (WxHxD) With cabinet	68 kg (148 lb.) 50.3 x 38.1 x 75.5 cm / 19.8 x 15 x 29.7 in 48.3 x 35.6 x 75.5 cm / 19 x 14 x 29.7 in				
With cabinet Without cabinet Size (WxHxD) With cabinet Without cabinet	68 kg (148 lb.) 50.3 x 38.1 x 75.5 cm / 19.8 x 15 x 29.7 in 48.3 x 35.6 x 75.5 cm / 19 x 14 x 29.7 in n EAR99				
With cabinet Without cabinet Size (WxHxD) With cabinet Without cabinet	68 kg (148 lb.) 50.3 x 38.1 x 75.5 cm / 19.8 x 15 x 29.7 in 48.3 x 35.6 x 75.5 cm / 19 x 14 x 29.7 in				
With cabinet Without cabinet Size (WxHxD) With cabinet Without cabinet Export Classification	68 kg (148 lb.) 50.3 x 38.1 x 75.5 cm / 19.8 x 15 x 29.7 in 48.3 x 35.6 x 75.5 cm / 19 x 14 x 29.7 in n EAR99				

1000A400 10 kHz - 400 MHz 1000 W CW

Rated Output Power	1,200 W typ., 1000 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	1 Typ. 1,200 W / min. 1000 W
Power Output @ 1 dB compression	1 Typ. 1000 W / min. 800 W
Flatness	±1.5 dB typ. / ±2 dB max.
Frequency Response 10	kHz–400 MHz instantaneously
Gain (at max. setting)	60 dB min.
Gain Adjustment (continuous range	e) 25 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance Will operate without damage or a any load impedance without the	
Modulation Capability Will faithfully reproduce AM, FM, appearing on the input signal.	or pulse modulation
Harmonic Distortion	Minus 20 dBc max. at 1000 W
Spurious	Minus 73 dBc typ
Third Order Intercept Point	68 dBm typ.
Noise Figure	8 dB typ
Primary Power	200 – 240 VAC

200 – 240 VAC 3-phase, 50/60 Hz, 5.2 kW



Connectors	
RF Input	Type N female
RF Output	7–16 DIN female, rear
Remote Interfaces	
IEEE-488	24-pin female
RS-232	9-pin Subminiature D female
Fiber optic	ST Conn Tx and Rx RS-232
USB 2 Ethernet	Type B RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	124.8 kg (275 lb.)
Size (WxHxD)	56.1 x 97.8 x 82.5 cm / 22.1 x 38.5 x 32.5 in.
Environmental	
Operating Temperature	: 5°C / +40°C
Operating Altitude:	Up to 2000 M
Shock and vibration:	Normal Truck Transport
Regulatory Compliance	
EMC	EN 61326-1
Safety	UL 61010-1, CAN/CSA C22.2 #61010-1
,	CENELEC EN 61010-1
RoHS	DIRECTIVE 2011/65/EU
Export Classification	EAR99
	1000A400
1800	Psat
1400	Pade Pade
<u>وہ</u> 1000	P1dB

Contents

Product Catalog 2023

RF Solid State

For Sales, call: 215.723.8181

Universal Series

-P1dB -P3dB -P@0dBm Input

For an Applications Engineer, call: 800.933.8181

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VATTS

Accessories

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Microwave	Solid State Pulse

TWT

Syste

ems	Antennas

Contact

0 120 150 180 210 240 FREQUENCY (MHz)

AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W - 10 kW

50W1000D 50 - 1000 MHz 50 W CW

Rated Output Power	70 W typ., 50 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
	Typ. 70 W / min. 60 W
Power Output @ 1 dB compression	
	Typ. 60 W / min. 45 W
Flatness	±1 dB typ./±1.5 dB max.
Frequency Response	50–1000 MHz instantaneously
Gain (at max. setting)	48 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

...

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Harmonic	Distortion	

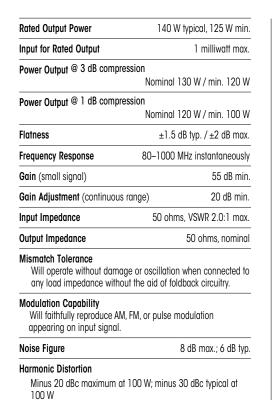
	Minus 30 dBc typ. at 50 W
Spurious	Minus 73 dBc typ.
Third Order Intercept Point	55 dBm typ.
Noise Figure	8 dB typ.

Find it Fast



Primary Power	100 040 1/4
	100 – 240 VA 50 / 60 Hz, 250 V
Connectors	
RF Input RF Output	Type N femal Type N femal
	туре и тепци
Remote Interfaces	24-pin femal
RS-232	9–pin Subminiature D femal
Fiber optic	ST Conn Tx and Rx RS-23
USB 2	Type
Ethernet	RJ-4
Safety Interlock	15-pin Subminiature I
Cooling	Forced air (self-contained fans
Weight With cabinet Without cabinet Size (WxHxD) With cabinet Without cabinet	17.7 kg (39 lb. 9.5 kg (21 lb. 50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 ir 48.3 x 13.2 x 55.1 cm / 19.8 x 5.2 x 21.7 ir
Export classification	
100	50W1000D
95 90	
85	PSat
x) 75	3dB
70 P1dB	
≤ 65 60	
55	
50	-++++++++++N
45	

125W1000A 80 - 1000 MHz 125 W CW





Primary Power	100 040140
	100 – 240 VAC
	50/60 Hz, 600 W
Connectors	
RF Input	Type N female on front panel Type N female on front pane
RF Output Remote Interfaces	Type in ternale off from patie
IEEE-488	24–pin female
RS-232	9-pin Subminiature D (female)
Fiber Optic	ST Conn Tx and Rx RS-232
USB 2	Туре Е
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight With cabinet Without cabinet	26.5 kg (58.5 lb.) 15.8 kg (34.75 lb.)
Size (WxHxD) With cabinet Without cabinet	51 x 17 x 65.3 cm / 20.1 x 6.7 x 25.7 in 48.3 x 13.4 x 65.3 cm / 19 x 5.3 x 25.7 in
Export Classification	EAR99
TY	PICAL PSAT POWER @ 0 dBm INPUT
105.00 Post Link 10.00W 125	W [Tiace Max On]
175.00	
165.00	
155.00	~^~
145.00	
135.00	
115.00	
105.00	

For Sales, call: 215.723.8181

For an Applications Engineer, call: 800.933.8181

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Contents

RF Solid State

Product Catalog

2023

Universal Series

Minus 20 dBc max. at 50 W.

Solid State Pulse Microwave

TWT

Third Order Intercept Point

Spurious

Systems

Antennas Accessories

58 dBm typ.

Minus 73 dBc typ.

Contact **AR Companies**

y Start 80.0000 MH	u —		

Frequency Range 10 kHz - 1 GHz

Power Range 1 W – 10 kW

150W1000B 80 - 1000 MHz 150 W CW

Rated Output Power	160 W typical, 130 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	on
	Nominal 150 W / min. 125 W
Power Output @ 1 dB compression	on
	Nominal 125 W / min. 100 W
Flatness	±1.5 dB typ. / ±2 dB max.
Frequency Response	80–1000 MHz instantaneously
Gain (small signal)	53` dB min.
Gain Adjustment (continuous ran	ge) 20 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance Will operate without damage of any load impedance without th	or oscillation when connected to he aid of foldback circuitry.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on input signal.

•	Noise	Figure	
---	-------	--------	--

Harmonic Distortion

Minus 20 dBc maximum at 100 W; minus 30 dBc typical at 100 W

Find it Fast

Third Order Intercept Point	58 dBm typ.
Spurious	Minus 73 dBc typ.

Spurious			
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Primary Power	
	100 – 240 VAC
	50/60 Hz, 650 W
Connectors	
RF Input RF Output	Type N female on front pane Type N female on front pane
Remote Interfaces	Type in territile off from pulle
IEEE-488	24-pin female
RS-232	9–pin Subminiature D (female)
Fiber Optic	ST Conn Tx and Rx RS-232
USB 2	Туре Е
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
	36.7 kg (81 lb.) 25.4 kg (56 lb.) 0.5 x 74.9 cm / 19.8 x 8.1 x 29.5 in
	·····
Export Classification	·····
Export Classification	x 17.7 x 74.9 cm / 19 x 7 x 29.5 in EAR99 WER (P1 dB, P3 dB compression)
Export Classification TYPICAL OUTPUT PO	EAR99

250W1000C 80 - 1000 MHz 250 W CW

Horse Figure Harmonic Distortion		
Will faithfully reproduce AM, FM, appearing on input signal. Noise Figure	or pulse modulation 8 dB max.; 6 dB typ	
Modulation Capability		
Mismatch Tolerance Will operate without damage or any load impedance without the		
Output Impedance	50 ohms, nominal	
Input Impedance	50 ohms, VSWR 1.5:1 max.	
Gain Adjustment (continuous range	e) 20 dB min.	
Gain (at max. setting)	54 dB min.	
Frequency Response	80–1000 MHz instantaneously	
Flatness	±2 dB max./±1.5 dB typ	
Power Output @ 1 dB compressio Typical: 250 W, Mi	nimum: 225 W up to 500 MHz, 200 W 500 – 1000 MHz	
	nimum: 275 W up to 500 MHz; 250 W 500 – 1000 MHz	
Input for Rated Output	1 milliwatt max.	
Rated Output Power	300 W typ., 250 W min	



Primary Power	
	100 - 240 VAC 50/60 Hz, 1000 W
	00/00 Hz, 1000 H
Connectors RF Input	Type N female on front pane
RF Output Type N female on fr	
Remote Interfaces IEEE-488	24–pin female
RS-232	9-pin Subminiature D (female
Fiber Optic	ST Conn Tx and Rx RS-232
USB 2	Туре Е
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight With cabinet Without cabinet	42.6 kg (94 lb.) 31.3 kg (69 lb.)
Size (WxHxD) With cabinet Without cabinet	50.3 x 20.5 x 74.9 cm / 19.8 x 8.1 x 29.5 in 48.3 x 17.7 x 74.9 cm / 19 x 7 x 29.5 in.
Export Classification	EAR99
450	250W1000C Typical Output Power
425 400 375 350	
1325 300 275 250	Pst Ps0
250	P1d8



Product	Catalog	1
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RF Solid State

8 dB max.; 6 dB typ.

2023

For Sales, call: 215.723.8181

Freq. (MHz)

For an Applications Engineer, call: 800.933.8181

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62 dBm typ.

Antennas

Minus 73 dBc typ.

Universal Series

Solid State Pulse Microwave

TWT

Third Order Intercept Point

Spurious

Systems

Contact Accessories

AR Companies

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Contents

Frequency Range 10 kHz - 1 GHz

Power Range 1 W - 10 kW

500W1000C 80 - 1000 MHz 500 W CW

Rated Output Power	600 W typ., 500 W Minimum	
Input for Rated Output	1 mW max.	
Power Output @ 3 dB compressio	n	
Typical: 575 W, Minimum: 525 W up to 700 M 475 W 700 – 1000 N		
Power Output @ 1 dB compressio	n	
Typical: 500 \	W, Minimum:450 W up to 700 MHz, 425 W 700 – 1000 MHz	
Flatness	±1.0 dB max./±1.5 dB max	
Frequency Response	80–1000 MHz instantaneously	
Gain (at max. setting)	57 dB min	
Gain Adjustment (continuous rang	je) 25 dB min.	
Input Impedance	50 ohms, VSWR 1.5:1 max	
Output Impedance	50 ohms, nomina	

load impedance without the aid of foldback circuitry.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on input signal.		
Noise Figure	8 dB max.; 6 dB typ.	
Harmonic Distortion		
	Minus 20 dBc maximum at 425 W; minus 30 dBc typical at 425 W	
Third Order Intercept Point	63 dBm typ.	
Spurious	Minus 73 dBc typ.	



Primary Power	
	100 – 240 VAC 50/60 Hz, 1,800 W
Connectors	
RF Input	Type N female
RF Output	Type N female
Remote Interfaces	
IEEE-488	24–pin female
RS-232	9-pin Subminiature D (female)
Fiber Optic	ST Conn Tx and Rx RS-232
USB 2	Type B
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight With cabinet Without cabinet Size (WxHxD)	69.4 kg (153 lb.) 50.8 kg (112 lb.)
	3.1 x 74.9 cm / 19.8 x 15 x 29.5 in. 35.6 x 74.9 cm / 19 x 14 x 29.5 in. EAR99
Without cabinet 48.3 x	35.6 x 74.9 cm / 19 x 14 x 29.5 in.
Without cabinet 48.3 x 3	35.6 x 74.9 cm / 19 x 14 x 29.5 in. EAR99
Without cabinet 48.3 x . Export Classification	35.6 x 74.9 cm / 19 x 14 x 29.5 in. EAR99
Without cabinet 48.3 x	35.6 x 74.9 cm / 19 x 14 x 29.5 in. EAR99
Without cabinet 48.3 x	35.6 x 74.9 cm / 19 x 14 x 29.5 in. EAR99 500W1000C
Without cabinet 48.3 x 5 Export Classification	35.6 x 74.9 cm / 19 x 14 x 29.5 in. EAR99 500W1000C
Without cabinet 48.3 x	35.6 x 74.9 cm / 19 x 14 x 29.5 in. EAR99 500W1000C
Without cabinet 48.3 x	35.6 x 74.9 cm / 19 x 14 x 29.5 in. EAR99 500W1000C

800W1000 80 - 1000 MHz 800 W CW

Rated Output Power (80 - 6 Rated Output Power (650 -	
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB comp Typical: 900 W / 800 V	ression N min. up to 650 MHz, Typical 800 W/ 700 W min. from 650 – 1000 MHz
Power Output @ 1 dB comp Typical: 850 W / 725 V	ression V min. up to 650 MHz, Typical 700 W/ 625 W min. from 650 – 1000 MHz
Flatness	±2.0 dB max; ±1.5 dB typ.
Frequency Response	80–1000 MHz instantaneously
Gain (small signal)	62 dB min.
Gain Adjustment (continuou	ıs range) 20 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, nominal
	age or oscillation when connected to nout the aid of foldback circuitry.
Modulation Capability Will faithfully re	produce AM, FM, or pulse modulation appearing on input signal.
Harmonic Distortion	

Minus 20 dBc max. at 800 W
66 dBm typ.
Minus 73 dBc typ.
8 dB max., 6 dB typ.



200 – 240 VAC
50 / 60 Hz, 2,800W
Type N female
Type 7–16 DIN female on rear panel
24–pin female
9-pin Subminiature D (female)
ST Conn Tx and Rx RS-232
Type B
RJ-45
15-pin Subminiature D
Forced air (self-contained fans
64 kg (141 lb.)
44.9 kg (110 lb.)
7 x 65.3 cm (19.8 x 18.5 x 25.7 in.)
EAR99



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	91		
		6	

Contents

Product Catalog 2023

Universal Series

For Sales, call: 215.723.8181

For an Applications Engineer, call: 800.933.8181

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Antennas

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Find it Fast	RF Solid State

Solid State Pulse Microwave

Systems

Contact **Accessories**

AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W – 10 kW

1000W1000H 80 - 1000 MHz 1000 W CW

Rated Output Power 1250 W ty 1100 W typ.,	p., 1100 W min. (80 - 650 MHz) 1000 W min. (650 - 1000 MHz)	
Input for Rated Output 1 milliwatt max		
Power Output @ 3 dB compression Typical: 1,250 W / 1,100 W min. up to 650 MHz; Typical 1100 W/ 1000 W min. from 650 – 1000 MHz		
Power Output @ 1 dB compression Typical: 1150 W / 1050 W min. up to 650 MHz, Typical 1000 W/ 950 W min. from 650 – 1000 MHz		
Flatness ±2 dB max; ±1.5 dB ty		
Frequency Response 80–1000 MHz instantaneous		
Gain (small signal) 62 dB mi		
Gain Adjustment (continuous range) 20 dB mi		
Input Impedance	50 ohms, VSWR 1.5:1 max.	
Output Impedance 50 ohms, nomin		

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on input signal. Harmonic Distortion @ 1000 W Minus 20 dBc max.

	Minus 40 dBc typ.
Third Order Intercept Point	66 dBm typ.
Spurious	Minus 73 dBc typ.
Noise Figure	8 dB max., 6 dB typ.



Primary Power	
	200 – 240 VAC
	50 / 60 Hz, 3,750 W
Connectors	
RF Input	Type N female
RF Output	Type 7–16 DIN female on rear panel
Remote Interfaces	
IEEE-488	24-pin female
RS-232	9-pin Subminiature D (female)
Fiber Optic	ST Conn Tx and Rx RS-232
USB 2	Type B
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans
Weight	156 kg (343 lb.)
Size (WxHxD)	
57.3 x 13	6.0 x 67.1 cm / 22.6 x 53.5 x 26.5 in
Export Classification	EAR99



2000W1000E 80 - 1000 MHz 2000 W CW

Rated Output Power	2,400 W typ., 2000 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB	compression Nominal 2,200 W / 1900 W min.
Power Output @ 1 dB	compression Nominal 2,000 W / 1,700 W min.
Flatness	±2 dB max. / ±1.5 dB typ
Frequency Response	80–1000 MHz instantaneously
Gain (small signal)	66 dB min.
Gain Adjustment (cont	inuous range) 20 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.; 1.3:1 typ
Output Impedance	50 ohms, nominal
to any load impeda	damage or oscillation when connected nce without the aid of foldback circuitry. above 6:1 may limit output to 1000 watts
Harmonic Distortion @	2000 W – 20 dBc max

70 dBm typ.

Minus 73 dBc typ.

8 dB max., 6 dB typ.

50 / 60 Hz, 3 phase, 7.0 kW

200 - 240 VAC, Delta-connected (4-wire) 380 – 415 VAC, Wye-connected (5-wire)

eously	Ethernet Safety Interlock	RJ-45 15-pin female subminiature D, rear panel
3 min.	Cooling	Forced air (self–contained fans)
8 min.	Weight (approximate)	273 kg (600 lb.)
1 typ. minal	Size (WxHxD) (3 cabinets 5	s) 7.3 x 136.0 x 95.5 cm / 22.6 x 53.5 x 37.6 in.
he	Export Classification	EAR99

Connectors **RF** Input

RF Output

Forward Sample

Reverse Sample

IEEE-488

RS-232

USB 2

Fiber Optic

Remote Interfaces:



• • •

Type N female on rear panel

N female, front

N female, front

24-pin female

Type B

Type 1 5/8 female on rear panel

9-pin Subminiature D, female

ST Conn Tx and Rx RS-232

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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Third Order Intercept Point

Primary Power (user must specify)

Spurious

Noise Figure

Frequency Range 10 kHz – 1 GHz Power Range

3000W1000B 80 - 1000 MHz 3000 W CW

Rated Output Power	3000 W typ., 2800 W min
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB comp	ression
	al 3000 W / 2,600 W min. up to 500 MHz; 2,400 W from 500 – 1000 MHz
Power Output @ 1 dB comp	ression
	I 2,500 W / 2,250 W min. up to 500 MHz; 1,850 W from 500 – 1000 MHz
Flatness	±2 dB max. / ±1.5 dB typ.
Frequency Response	80 – 1000 MHz instantaneously
Gain (at max. setting)	64.8 dB min.
Gain Adjustment (continuou	ıs range) 25 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.; 1.3:1 typ.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 1,500 W reflected power.

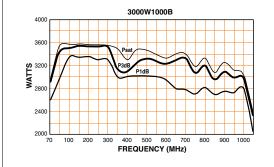
Harmonic Distortion	Minus 20 dBc max. at 2,400 W, -20 dBc typ. at 3000 W
Third Order Intercept Point	72 dBm typ.
Noise Figure	8 dB max., 6 dB typ.

Primary Power (user must specify)

200 – 240 VAC, Delta connected (4–wire) 360 – 435 VAC, Wye connected (5–wire) 50 / 60 Hz, 3 phase, 14 kVA



Forced air (s	elf-contained fans), enters front and bottom
Cooling	alf contained fract) entrys front and bottom
Safety Interlock	15-pin female subminiature D, rear panel
USB 2 Ethernet	Type B R.I–45
Fiber Optic USB 2	ST Conn Tx and Rx RS-232
RS-232	9–pin Subminiature D, female
IEEE-488	24–pin female
Remote Interfaces:	/1
Reverse Sample	Type N female, front
RF Output Forward Sample	Type 1 5/8 female on rear panel Type N female, front
RF Input	Type N female on rear panel
DE La suit	Turne Ni ferrerale and manual and



4000W1000B 80 - 1000 MHz 4000 W CW

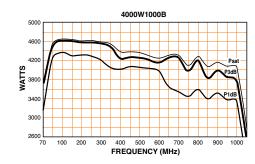
Rated Output Power	4000 W typ., 3700 W	min.
Input for Rated Output	1 milliwatt	max.
Power Output @ 3 dB	compression	
	nal 4000 W / 3,600 W min. up to 500 3,400 W from 500 – 1000	
Power Output @ 1 dB	compression	
Nomir	nal 3,500 W / 3000 W min. up to 500 2,500 W from 500 – 1000	
Flatness	±2 dB max. / ±1.5 dB	3 typ
Frequency Response	80 – 1000 MHz instantaneo	ously
Gain (at max. setting)	66 dB	min.
Gain Adjustment (cont	inuous range) 25 dB	min.
Input Impedance	50 ohms, VSWR 1.5:1 max.; 1.3:1	typ.
Output Impedance	50 ohms, non	ninal
Mismatch Tolerance*		

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 2000 W reflected power.

Harmonic Distortion	Minus 20 dBc max. at 3,400 W, -20 dBc typ. at 4000 W
Third Order Intercept Point	73 dBm typ.
Noise Figure	8 dB max., 6 dB typ.
	cify) 240 VAC, Delta connected (4-wire) - 435 VAC, Wye connected (5-wire) 50 / 60 Hz, 3 phase, 17.5 kVA



Connectors	
RF Input	Type N female on rear panel
RF Output	Type 1 5/8 female on rear panel
Forward Sample	Type N female, front
Reverse Sample	Type N female, front
Remote Interfaces:	
IEEE-488	24-pin female
RS-232	9–pin Subminiature D, female
Fiber Optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin female subminiature D, rear panel
Cooling	
Forced air	(self-contained fans), enters front and bottom
Weight (approximate)	432 kg (950 lb.)
Size (WxHxD) (2 joine	d cabinets)
. ,.,	111.8 x 177.8 x 97.6 cm / 44 x 70 x 38.4 in.
Export classification	EAR99



9	Proc	duct Catalog	2023 For Sc	ales, call: 215.	723.8181 For	an Applications	s Engineer, call:	800.933.8181	arworld.us		23
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 10 kHz - 1 GHz

Power Range 1 W – 10 kW

6000W1000 80 - 1000 MHz 6000 W CW

Rated Output Power	6000 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB com	pression
	000 W / 5,500 W min. up to 700 MHz; 5,100 W from 700 – 1000 MHz
Power Output @ 1 dB com	pression
	,500 W / 5000 W min. up to 700 MHz; 4,500 W from 700 – 1000 MHz
Flatness	±2 dB max. / ±1.5 dB typ.
Frequency Response	80–1000 MHz instantaneously
Gain (at max. setting)	67.8 dB min.
Gain Adjustment (continuo	us range) 25 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.; 1.3:1 typ.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	

Mismatch Tolerance

Contents

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 3000 W reflected power.

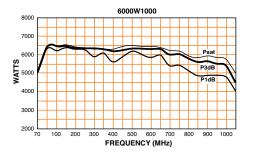
Harmonic Distortion	Minus 20 dBc max. at 5,500 W, -20 dBc typ. at 6000 W		
Third Order Intercept Point	75 dBm typ.		
Noise Figure	8 dB max., 6 dB typ.		
	• 、		

Primary Power (user must specify) 200 – 240 VAC, Delta connected (4-wire) 360 – 435 VAC, Wye connected (5-wire) 50 / 60 Hz, 3 phase, 24 kVÁ

Find it Fast



Connectors	
RF Input	Type N female on rear panel
RF Output	Type 3 1/8 EIA female on rear panel
Forward Sample	Type N female, front
Reverse Sample	Type N female, front
Remote Interfaces:	
IEEE-488	24-pin female
RS-232	9–pin Subminiature D, female
Fiber Optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin female subminiature D, rear panel
Cooling	
Forced air (self–contained fans), enters front and bottom
Weight (approximate	e) 703 kg (1,550 lb.)
Size (WxHxD) (3 join	ed cabinets)
	170 x 183 x 99 cm / 67 x 72 x 39 in.
Export classification	EAR99



10000W1000A 80 - 1000 MHz 10000 W CW

Rated Output Power	Nominal, 12,500 W
	12000 W min. up to 700 MHz
	10,500 W min., 700 – 1000 MHz
Input for Rated Output	1 milliwatt max
Power Output @ 3 dB com	pression
Nominal 12,5	500 W / 12000 W min. up to 700 MHz
	10000 W from 700 – 1000 MHz
Power Output @ 1 dB com	pression
	00 W / 10,500 W min. up to 700 MHz
	9,500 W from 700 – 1000 MHz
Flatness	±2 dB max. / ±1.5 dB typ
Frequency Response	80–1000 MHz instantaneously
Gain (at max. setting)	70 dB min
Gain Adjustment (continuo	us range) 25 dB min
Input Impedance	50 ohms, VSWR 1.5:1 max.; 1.3:1 typ
Output Impedance	50 ohms, nomina
Mismatch Tolerance Will operate without dam to any load impedance w	50 ohm nage or oscillation when cor without the aid of foldback of

However, mismatch above 6:1 may limit output to 6000 W reflected power.

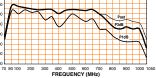
Modulation Capability

Faithfully reproduces AM, FM, or pulse modulation appearing on input signal.

Minus 20 dBc max. at 10000 W, Harmonic Distortion -25 dBc typ. at 10000 W



Bm typ.	Third Order Intercept Point 78 dBm t					
dB typ	Noise Figure					
	Primary Power (specify voltage)					
4-wire)	(1)					
5-wire)						
, 18000Ŵ						
	;	Connectors				
ar pane		RF Input				
ar pane		RF Output				
le, front		Forward So				
le, front		Reverse Sam				
		Remote Int				
female		IEEE-488				
female 2S–232	-	RS-232				
Type B	plic	Fiber Opt USB 2				
RJ-45	. +	Ethernet				
ar pane	Safety Interlock					
i puno	TOTTOOK	Cooling				
bottom	Forced air (s	oooning				
ıy racks		SYSTEM:				
100 lb.)	proximate)	Weight (appr				
	D)	Size (WxHxD)				
x 39 in	,					
EAR99	sification	Export classi				
	45500					
	15500					
	13500					
	15500	·				



9	6	Product Catalog	2023

For Sales, call: 215.723.8181

For an Applications Engineer, call: 800.933.8181

arworld.us

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RF Solid State Universal Series

Solid State Pulse Microwave

TWT

Systems

Antennas

Contact Accessories

AR Companies

The "U" Series is a customizable, Class A design is ideal for universal applications such as laboratory and EMC testing, testing antennas, components, piezoelectric devices, wireless chargers, and more. The "U" Series are single band amplifiers available in 3dB increments, up to 500 W of power, and span 10 kHz - 1000 MHz.



TWT

Systems

Antennas

Contact

Accessories

AR Companies

Solid State Pulse

Contents

Find it Fast

RF Solid State

Universal Series

Microwave

Frequency Range 10 kHz – 1000 MHz

Power Range 1 - 500 W

101000 10 kHz - 1000 MHz 1 W CW

Rated Output Power	1 watt min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
	Typ. 1.5 W / min. 1 watt
Power Output @ 1 dB compression	
	Typ. 1.5 W / min. 1 watt
Flatness	±0.8 dB typ., ±1 dB max.
Frequency Response 10 kHz -	1000 MHz instantaneously
Gain (at max. setting)	30 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

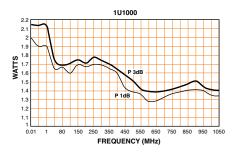
Modulation Capability

	M, FM, or pulse modulation bearing on the input signal.
Third Order Intercept Point	42 dBm typ.
Noise Figure	8 dB max., 6 dB typ.
Harmonic Distortion Minus 20 dBc max. d	at 1 watt, minus 30 dBc typ.
Spurious	Minus 73 dBc typ.
Primary Power (selected automatically	′) 90 – 264 VAC

50/60 Hz, 50 W



Connectors RF Input RF Output	Type N female on front panel Type N female on front panel
Cooling	Forced air (self-contained fans)
Weight	4.5 kg (11 lb.)
Size (WxHxD)	26 x 11.4 x 28.2 cm / 10.25 x 4.5 x 11.1 in.
Export classifica	tion EAR99



2.501000 10 kHz - 1000 MHz 2.5 W CW

Rated Output Power	2.5 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compres	
	Typ. 3 W / min. 2.5 W
Power Output @ 1 dB compres	sion
	Typ. 2.5 W / min. 2 W
Flatness	±0.8 dB typ., ±1 dB max.
Frequency Response	10 kHz–1000 MHz instantaneously
Gain (at max. setting)	33 dB min.
Gain Adjustment (continuous r	ange) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
	e or oscillation when connected to t the aid of foldback circuitry.
Modulation Capability Will faithfully repro	duce AM, FM, or pulse modulation appearing on the input signal

45 dBm typ.

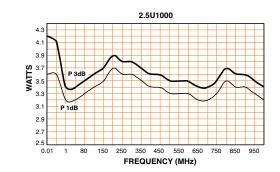
90-264 VAC 50/60 Hz, 50 W

8 dB max., 6 dB typ.

Minus 20 dBc max. at 2 W Minus 73 dBc typ.



Connectors RF Input RF Output	Type N female on front panel Type N female on front panel
Cooling	Forced air (self-contained fans)
Weight	4.5 kg (11 lb.)
Size (WxHxD)	26 x 11.4 x 28.2 cm / 10.25 x 4.5 x 11.1 in.
Export classification	EAR99



9	Proc	luct Catalog	2023 For Sc	iles, call: 215.	723.8181 For (an Application	s Engineer, call: 8	800.933.8181	arworld.us		26
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Third Order Intercept Point

Primary Power (selected automatically)

Noise Figure Harmonic Distortion

Spurious

Frequency Range 10 kHz – 1000 MHz Power Range **1 – 500 W**

5U1000 10 kHz – 1000 MHz 5 W CW

Rated Output Power	5 W min.
Input for Rated Output 1 milliwa	
Power Output @ 3 dB compression	n
•	Typ. 5 W / min. 4.5 W
Power Output @ 1 dB compression	n
	Typ. 4 W / min. 3.5 W
Flatness	±1.3 dB typ., ±1.5 dB max.
Frequency Response	10 kHz – 1000 MHz instantaneously
Gain (at max. setting)	37 dB min.
Gain Adjustment (continuous ranç	ge) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

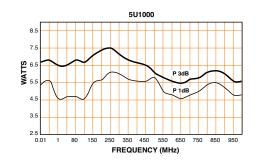
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

	e AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	46 dBm typ.
Noise Figure	8 dB max., 6 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 3.5 W
Spurious	Minus 73 dBc typ.
Primary Power (selected automatically)	90 – 264 VAC 50/60 Hz, 70 W



Connectors RF Input RF Output	Type N female on front panel Type N female on front panel
Cooling	Forced air (self-contained fans)
Weight	4.5 kg (11 lb.)
Size (WxHxD)	26 x 11.4 x 28.2 cm / 10.25 x 4.5 x 11.1 in.
Export classificati	on EAR99



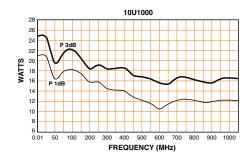
10U1000 10 kHz – 1000 MHz 10 W CW

Rated Output Power	15 W typ., 10 W min
Input for Rated Output	1 milliwatt max
Power Output @ 3 dB com	pression Typ. 15 W / min. 10 W
Power Output @ 1 dB com	pression Typ. 12 W / min. 10 W
Flatness	±1 dB typ., ±1.5 dB max
Frequency Response	10 kHz – 1000 MHz instantaneously
Gain (at max. setting)	40 dB min
Gain Adjustment (continue	bus range) 20 dB min
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nomina
	mage or oscillation when connected to thout the aid of foldback circuitry.
Modulation Capability Will faithfully r	reproduce AM, FM, or pulse modulation appearing on the input signal

Will faithfully reproc	duce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	50 dBm typ.
Noise Figure	8 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 10 W
Spurious	Minus 73 dBc typ.
Primary Power (selected automo	atically) 100 – 240 VAC 50/60 Hz, 150 W



Connectors RF Input RF Output	Type N female Type N female
Remotes Package IEEE-488 RS-232 Fiber optic USB 2 Ethernet Safety Interlock	24–pin female 9–pin subminiature D (female) ST Conn Tx and Rx RS–232 Type B RJ–45 15–pin subminiature D
Cooling	Forced air (self-contained fans)
Weight With Cabinet Without Cabinet	17.7 kg (41 lb.) 9.5 kg (23 lb.)
Size (WxHxD) With Cabinet Without Cabinet	50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 in. 48.3 x 13.2 x 55.1 cm / 19 x 5.2 x 21.7 in.
Export classification	EAR99



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Frequency Range 10 kHz – 1000 MHz

Power Range 1 - 500 W

2501000 10 kHz - 1000 MHz 25 W CW

Rated Output Power	30 W typ., 25 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compress	sion
·	Typ. 30 W / min. 25 W
Power Output @ 1 dB compress	sion
	Typ. 25 W / min. 20 W
Flatness	±1 dB typ., ±1.5 dB max.
Frequency Response 10	kHz – 1000 MHz instantaneously
Gain (at max. setting)	44 dB min.
Gain Adjustment (continuous ra	nge) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

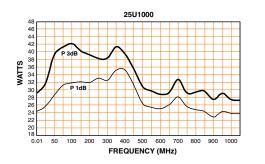
Thind Onder Interest Deint	
	appearing on the input signal.
Will faithfully repro	duce AM, FM, or pulse modulation

Third Order Intercept Point	52 dBitt typ.
Noise Figure	8 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 20 W
Spurious	Minus 73 dBc typ.
Primary Power (selected autom	atically) 100 – 240 VAC

100 – 240 VAC
50/60 Hz, 200 W

Connectors	
RF Input	Type N female
RF Output	Type N female
Remotes Package	
IEEE-488	24–pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	ŔĴ–45
Safety Interlock	15–pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	17.7 kg (41 lb.)
Without Cabinet	9.5 kg (23 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 in
Without Cabinet	48.3 x 13.2 x 55.1 cm / 19 x 5.2 x 21.7 in

0



50U1000 10 kHz - 1000 MHz 50 W CW

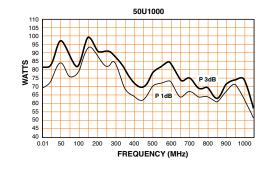
Rated Output Power	70 W typ., 50 W min
Input for Rated Output	1 milliwatt max
Power Output @ 3 dB compr	r ession Typ. 70 W / min. 50 W
Power Output @ 1 dB compr	r ession Typ. 60 W / min. 45 W
Flatness	±1.5 dB typ., ±2 dB max
Frequency Response	10 kHz – 1000 MHz instantaneously
Gain (at max. setting)	47 dB min
Gain Adjustment (continuous	s range) 20 dB min
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nomina
	age or oscillation when connected to out the aid of foldback circuitry.
Modulation Capability Will faithfully rep	produce AM, FM, or pulse modulation appearing on the input signal
Third Order Intercept Point	57 dBm typ
Noise Figure	8 dB typ
Harmonic Distortion	Minus 20 dBc max. at 45 W Minus 20 dBc typical at 50 W
Spurious	Minus 73 dBc typ

Primary Power (selected automatically)

100 – 240 VAC 50/60 Hz, 250 W



Connectors	- N ()
RF Input	Type N female
RF Output	Type N female
Remotes Package	
IEEE-488	24–pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Type B
Ethernet	ŔJ–45
Safety Interlock	15–pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	17.7 kg (41 lb.)
Without Cabinet	9.5 kg (23 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 15.5 x 55.1 cm / 19.8 x 6.1 x 21.7 in
Without Cabinet	48.3 x 13.2 x 55.1 cm / 19 x 5.2 x 21.7 in.
Export classification	EAR99



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 10 kHz - 1000 MHz

Power Range 1 - 500 W

100U1000A 10 kHz - 1000 MHz 100 W CW

Rated Output Power	120 W typ., 100 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB c	ompression
Ţ	Typ. 120 W / min. 90 W, 0.01 - 600 MHz: /p. 100 W / min. 80 W, 600 MHz - 1000 MHz:
Power Output @ 1 dB c	ompression
	Typ. 45 W / min. 35 W, 0.0150 MHz: Typ. 90 W / min. 75 W, .50 MHz - 1000 MHz:
Flatness	±1.5 dB typ., ±2 dB max.
Frequency Response	10 kHz – 1000 MHz instantaneously
Gain (small signal)	52 dB min.
Gain Adjustment (contin	nuous range) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
	damage or oscillation when connected to any out the aid of foldback circuitry.

Modulation Capability

Will fait	hfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Po	bint 60 dBm typ.
Noise Figure	8 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 100 W, except for Minus 18 dBc typical at 100 W, from 0.01 - 0.50 MHz and 250 - 400 MHz
Spurious	Minus 73 dBc typ.



Primary Power (sel	ected automatically)
	100 – 240 VAC
	50/60 Hz, 450 W
Connectors	
RF Input	Type N female
RF Output	Type N female
Remotes Package	
IEEE-488	24-pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	26.5 kg (58.5 lb.)
Without Cabinet	15.8 kg (34.75 lb.)
Size (WxHxD)	
With Cabinet	51.0 x 17.0 x 65.3 cm / 20.1 x 6.7 x 25.7 in
Without Cabinet	48.3 x 13.4 x 65.3 cm / 19.0 x 5.3 x 25.7 in
Export classificatio	n EAR99
	TYPICAL PSAT POWER © 0 dBm INPUT (Log Scole)
190.2	
170-	Mn
COD 2000	V M
120-	tu A

10 100

250U1000A 10 kHz - 1000 MHz 250 W CW

Rated Output Power 0.01 -700MHz: 280 watts typical, 250 watts minimum 700 -1000MHz: 225 watts typical, 210 watts minimum Input for Rated Output 1 milliwatt max. Power Output @ 3 dB compression 0.01 -700MHz: 270 watts typical, 240 watts minimum 700 -1000MHz: 225 watts typical, 190 watts minimum Power Output @ 1 dB compression 0.01 -700MHz: 240 watts typical, 200 watts minimum 700 - 1000MHz: 225 watts typical, 175 watts minimum ±1.5 dB typ., ±2 dB max. Flatness Frequency Response 10 kHz - 1000 MHz instantaneously Gain (at max. setting) 54 dB min. Gain Adjustment (continuous range) 20 dB min. 50 ohms, VSWR 2:1 max. Input Impedance **Output Impedance** 50 ohms, nominal Mismatch Tolerance Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

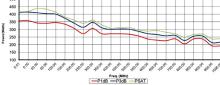
Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Third Order Intercept Point	62 dBm typ.
Noise Figure	8.5 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 200 W Minus 20 dBc typical at 250 W



Spurious	Minus 73 dBc typ.
Primary Power (selec	ted automatically)
	100 – 240 VAC
	50/60 Hz, 1,150 W
Connectors	
RF Input	Type N female
RF Output	Type N female
Remotes Package	
IEEE-488	24–pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	58.9 kg (130 lb.)
Without Cabinet	46.2 kg (102 lb.)
Size (W x H x D): 19'	6U Rack:
With cabinet:	50.3 x 28 x 74.9 cm (19.8 x 11.2 x 29.5 in)
Without Cabinet:	48.3 x 27.9 x 74.9 cm (19 x 11 x 29.5 in)
Export classification	EAR99
500	250U1000A Typical Output Power
450	



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500U1000	
100 kHz -1000 MHz	
500 W CW	

Rated Output Power	
0.1 – 3 350 – 6	350MHz: 650 watts typical, 500 watts m 650MHz: 525 watts typical, 400 watts m 100 MHz: 400 watts typical, 325 watts m
Input for Rated Output	1 mW M
Power Output @ 3 dB o	compression
350 - 0	350MHz: 650 watts typical, 500 watts m 650MHz: 500 watts typical, 375 watts m 100 MHz: 375 watts typical, 300 watts m
Power Output @ 1 dB o	compression
350 - 0	350MHz: 550 watts typical, 400 watts m 650MHz: 450 watts typical, 325 watts m 100 MHz: 350 watts typical, 275 watts m
Flatness	±2.0 dB typical, ±2.5 dB maximu
Frequency Response	100 kHz – 1000 MHz instantaneou
Gain (at max. setting)	57 dB m
Gain Adjustment (conti	nuous range) 20 dB m
Input Impedance	50 ohms, VSWR 2:0:1 m
Output Impedance	50 ohms, nomir
above which may lin operate with-out dar	r with-out foldback up to 6.0:1 mismatc nit to 250 wotts reflected power. Will nage or oscillation with any magnitude and load impedance.

Modulation Capability Third Order Intercept Point Noise Figure

elatemetal resected.	
ā	
	na narr
0	0 0 0
Harmonic Distortion	<-20 dBc for the output power at 1dB compression minimum limit
	-17 dBc for the output power at 3dB compression minimum limit
Spurious	Minus 73 dBc typ.
Primary Power (selecte	
	200 – 240 VAC 50/60 Hz, 2100 W
Connectors	T N/ I
RF Input RF Output	Type N female Type N female
Remotes Package	24-pin female
RS-232	9-pin subminiature D (female)
Fiber optic	ST Conn Tx and Rx RS-232
USB 2 Ethernet	Type B RJ-45
Safety Interlock	15–pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet Without Cabinet	79.4 kg (175 lbs) 60.8 kg (134 lbs)
Size (WxHxD)	

Size (WxHxD) With Cabinet 0.3 x 38.1 x 74.9 cm (19.8 x 15 x 29.5 in) Without Cabinet 48.3 x 35.6 x 74.9 cm (19 x 14.0 x 29.5 in)



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rl/microwave instrumentation		
POREA	200 Berling BF, One Internet In 100 Berling Internet In 100 Berling Internet Internet In 100 Berling Internet Internet Internet Internet Internet Internet Internet Internet I	
	dal Emote	
9		6

AR's microwave amplifiers are denoted as the "S" Series amplifiers, covering the 0.7 - 18 GHz frequency range. These amplifiers operate in frequency bands including; 0.7 - 6 GHz, 1 - 6 GHz, 1 - 2.5 GHz, and 6 to 18 GHz. Each band covers multiple power levels offering the highest available power for a specific frequency range. In addition to EMC testing, these amplifiers are particularly suited to Telecommunications testing requirements such power drivers

for Digital Predistortion, High Temperature Operating Life and Production Burn-in Systems.

Product Catalog

RF Solid State

Find it Fast

2023

Universal Series

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Microwave

Solid State Pulse

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TWT

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AR Companies

Contents

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

15**S**1**G**6 0.7 - 6 GHz 15 W CW

Rated Power Output	15 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	Nominal 20 W / min. 15 W
Power Output @ 1 dB compression	Nominal 15 W / min. 12 W
Flatness	±1.5 dB typ. / ±2 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (at max. setting)	43 dB min.
Gain Adjustment (continuous range)	10 dB min. (4096 stepsremote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nominal
Mismatch Tolerance* Will operate without damage or os any load impedance without the o	
, ,	AM, FM, or pulse modulation opearing on the input signal.
Third Order Intercept Point	48 dBm typ.
Noise Figure	10 dB typ.

Will faithf	ully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept	Point 48 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 15 W (0.7–6 GHz)

Spurious



	90 – 132, 180 – 264 VAC 50/60 Hz, single phase 210 W max
Connectors	T N/ 1 / 1
RF input RF output	Type N female on front pane Type N female on front pane
Remote Interfaces	
IEEE-488 RS-232	24-pin female
RS-232 (fiber optic)	9-pin Subminiature D (female) Type ST
USB 2	Type B
Ethernet	RJ-45
Safety Interlock	15-pin Subminiature D
Cooling	Forced air (self–contained fans)
Weight	
With Cabinet	15.9 kg (35 lb.)
Without Cabinet	10.2 kg (22.5 lb.)
Size (WxHxD)	F F 07 (100 (1 140)
	5.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in 3 x 12.7 x 37.6 cm / 19 x 5 x 14.8 in
Export Classification:	EAR99
30	15S1G6
<u>و</u> ²⁰	
10	

30S1G6 0.7 - 6 GHz 30 W CW

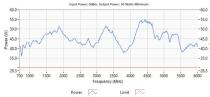
Rated Power Output	30 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	Nominal 35 W / min. 26 W
Power Output @ 1 dB compression	Nominal 30 W / min. 22 W
Flatness	1.5 dP tup / 1.2.5 dP
max.	±1.5 dB typ. / ±2.5 dB
Frequency Response	0.7–6 GHz instantaneously
Gain ₍ Small Signal ₎	49 dB min.
Gain Adjustment (continuous range)	10 dB min. (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nomina
Mismatch Tolerance Will operate without damage or os any load impedance without the a	

Modulation Capability Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Third Order Intercept Point	50 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 30 W
Spurious	Minus 73 dBc typ.



Primary Power (selected	d automatically)
	100 - 240 VAC
	50/60 Hz, single phase 300 W max.
Connectors	
RF input	Type N female on front pane
RF output	Type N female on front pane
Remote Interfaces	
IEEE-488	24-pin female
RS-232	9-pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2	Type B
Ethernet	RJ-45
Safety Interlock	15-pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	18.2 kg (40 lb.)
Without Cabinet	12.5 kg (27.5 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in
Without Cabinet	48.3 x 12.7 x 37.6 cm / 19 x 5 x 14.8 in
Export Classification:	EAR99
тү	PICAL OUTPUT POWER (Psat @ 0 dBm input)
60.0-	nit Power: OdBm, Output Power: 30 Watts Minimum -60.0



Contact

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	Pro
8	

oduct Catalog 2023 For Sales, call: 215.723.8181

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 FREQUENCY (GHz)

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Accessories

Antennas

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AR Companies

Contents

Find it Fast

RF Solid State Universal Series

Minus 73 dBc typ.

Microwave Solid State Pulse TWT

	Systems
--	----------------

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

30S1G6C 1 - 6 GHz 30 W CW

Rated Power Output	30 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	Nominal 45 W/min. 35 W
Power Output @ 1 dB compression	
·	Nominal 35 W / min. 25 W
Flatness	±1.5 dB typ. / ±2 dB max.
Frequency Response	1.0 – 6 GHz instantaneously
Gain (Small Signal)	46 dB min.
Gain Adjustment (continuous range)	10 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

Will faithfully repr	oduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	54 dBm typ
Noise Figure	10 dB typ
Harmonic Distortion	Minus 20 dBc max. at 30 W
Spurious	Minus 73 dBc typ.



Primary Power (selected automatically	v)
	100 – 240 VAC 47-63 Hz, single phase 400 W max.
Connectors RF input RF output	Type N female Type N female
Remote Interfaces IEEE-488 RS-232 9-p RS-232 (fiber optic) USB 2 Ethernet	24–pin female in Subminiature D (female) Type ST Type B RJ–45
Safety Interlock	15–pin Subminiature D
Cooling Force	ed air (self–contained fans)
Weight With Cabinet Without Cabinet	25.9 kg (57.0 lb.) 15.3 kg (33.75 lb.)
	3 cm / 20.1 x 6.7 x 25.7 in. 5.3 cm / 19 x 5.3 x 25.7 in.
Export Classification:	EAR99
TYPICAL PSAT POWER @ 0 dl	Bm INPUT
Test set 10,000 Test set 10,000 Test set 10,000 900 000 000 000 7000 000 000 000 900 000 000 000 900 000 000 000 900 000 000 000	

60S1G6 0.7 - 6 GHz 60 W CW

Rated Power Output	60 W min. (0.7–6 GHz)
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	Nominal 80 W / min. 65 W
Power Output @ 1 dB compression	Nominal 60 W / min. 50 W
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (small signal)	48 dB min.
Gain Adjustment (continuous range)	10 dB min. (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nominal
Mismatch Tolerance Will operate without damage connected to any load imped foldback circuitry.	
	AM, FM, or pulse modulation ppearing on the input signal
Third Order Intercept Point	56 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max at 60 W

Minus 20 dBc max. at 60 W

Minus 73 dBc typ.



Primary Power (selecte	d automatically)
	100 – 240 VAC 47-63 Hz, single phase 550 W max.
Connectors	
RF input RF output	Type N female Type N female
Remote Interfaces IEEE–488 RS–232	24-pin 0. nin Subministure D
RS-232 RS-232 (fiber optic) USB 2 Ethernet	9–pin Subminiature D Type ST Type B RJ–45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight With Cabinet Without Cabinet	28.4 kg (62.5 lb.) 20.2 kg (44.5 lb.)
Size (WxHxD) With Cabinet Without Cabinet	50.3 x 20.3 x 54.6 cm / 19.8 x 8 x 21.5 in. 48.3 x 17.8 x 54.6 cm / 19 x 7 x 21.5 in.
Export Classification:	3A001
тү	PICAL OUTPUT POWER (Psot @ 0 dBm input)
Comparison of the second	Machine Williams (Williams) Defended and (10,0000 U) Comparison
40.00 30.00 20.00	4: PASS

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Antennas

Contents

Find it Fast

RF Solid State Universal Series Microwave Solid State Pulse

TWT

Spurious

Sys	tems

Accessories	
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Contact **AR Companies**

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

75\$1G6C 1.0 - 6.0 GHz 75 W CW

75 W min. (1–6 GHz)
1 milliwatt max.
Nominal 85 W / min. 65 W
Nominal 70 W / min. 50 W
± 1.0 dB typ. / ± 2.5 dB max.
1–6 GHz instantaneously
51 dB min.
10 dB min. (4096 steps remote)
50 ohms, VSWR 2:1 max.
50 ohms, nominal
or oscillation when lance without the aid of

Modulation Capability

Contents

Will faithfully reprodu	appearing on the input signal.
Third Order Intercept Point	56 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion Minus 20 dBc max. at 75 W	for entire band except 2 - 3 GHz
Spurious	Minus 73 dBc typ.

Find it Fast

RF Solid State

Universal Series



Primary Power (selected aut	100 – 240 VA0 50/60 Hz, single phase 450 W max
Connectors RF input RF output	Type N female on front pane Type N female on front pane
Remote Interfaces IEEE-488 RS-232 RS-232 (fiber optic) USB 2 Ethernet	24–pir 9–pin Subminiature I Type S Type F RJ–45
Safety Interlock	15–pin Subminiature [
Cooling	Forced air (self-contained fans
Weight With Cabinet Without Cabinet	26.5 kg (58.5 lb. 15.8 kg (34.75 lb.
	7.0 x 65.3 cm / 20.1 x 6.7 x 25.7 ir 3.4 x 65.3 cm / 19.0 x 5.3 x 25.7 ir
Export Classification:	3A00 ⁻
TYPICAL P	SAT POWER @ 0 dBm INPUT
	Line construction (LCD) Construc

Microwave

125S1G6 0.7 – 6 GHz 125 W CW

Rated Power Output	125 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compress	ion Nominal 125 W / min. 120 W
Power Output @ 1 dB compress	ion Nominal 125 W/min. 100 W
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (small signal)	52 dB min
Gain Adjustment (continuous rar	nge) 10 dB min. (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nomina
Mismatch Tolerance Will operate without dam connected to any load in foldback circuitry.	age or oscillation when pedance without the aid of
Modulation Capability Will faithfully reprod	uce AM, FM, or pulse modulation appearing on the input signal
Third Order Intercept Point	58 dBm typ
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 125 W
Spurious	Minus 73 dBc typ.

Systems

Antennas

Accessories



Phase Linearity	±1 deg/100 MHz, typ
Primary Power (selected	automatically)
	100 - 240 VAC
	50/60 Hz, single phase
	1,200 W max
Connectors	
RF input	Type N female
RF output	Type N female
Remote Interfaces	
IEEE-488	24-pin
RS-232	9–pin Subminiature
RS-232 (fiber optic)	Type ST
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15-pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	45 kg (100 lb.)
Without Cabinet	20.2 kg (44.5 lb.)
Size (WxHxD)	
With Cabinet	50.5 x 25.9 x 63.0 cm / 19.9 x 10.2 x 24.8 in
Without Cabinet	48.3 x 22.3 x 61 cm / 19.0 x 8.8 x 24 in
Export Classification:	3A001
	TYPICAL OUTPUT POWER (Psat @ 0 dBm input)
An Prostland Appand A	All And Annual Annua
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Contact

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AR Companies

(9)	Proc	luct Catalog	Sales, call: 215.72	or an Application	s Engineer, call:	800.933.8181	arworld.us	
								1

Solid State Pulse

TWT

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

125\$1G6C 1.0 - 6 GHz 125 W CW

Rated Power Output	125 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
	Nominal 125 W / min. 120 W
Power Output @ 1 dB compression	
	Nominal 115 W / min. 100 W
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	1.0–6 GHz instantaneously
Gain (small signal)	55 dB min.
Gain Adjustment (continuous range)	10 dB min.
	(4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nominal
Mismatch Toloranco	

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

Will faithfully re	produce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	58 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion @ 100 W fo Minus	or entire band except 2 – 3 GHz 18 dBc max at 100 W from 2-3 GHz
Spurious	Minus 73 dBc typ.



	tically)					
	100-240 VAC					
	47-63 Hz, single phase, 1,150 W max.					
Connectors						
RF input	Type N female on front panel					
RF output	Type N female on front panel					
Remote Interfaces						
IEEE-488	24–pin					
RS-232	9–pin Subminiature					
RS-232 (fiber optic)	Type ST					
USB 2	Туре В					
Ethernet	RJ-45					
Safety Interlock	15-pin Subminiature D					
Cooling	Forced air (self-contained fans)					
Weight						
With Cabinet	29.5 kg (65 lb.)					
Without Cabinet	22.7 kg (50 lb.)					
	65.3 cm / 19.8 x 14.0 x 25.7 in. x 65.3 cm / 19 x 14.0 x 25.7 in.					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5						
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5	x 65.3 cm / 19 x 14.0 x 25.7 in 3A001					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5 Export Classification:	x 65.3 cm / 19 x 14.0 x 25.7 in 3A001					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5 Export Classification:	х 65.3 cm / 19 x 14.0 x 25.7 in 3A001 кезаны нечт					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5 Export Classification:	х 65.3 cm / 19 x 14.0 x 25.7 in 3A001 кезаны нечт					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5 Export Classification:	х 65.3 cm / 19 x 14.0 x 25.7 in 3A001 кезаны нечт					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5 Export Classification:	х 65.3 cm / 19 x 14.0 x 25.7 in 3A001 кезани ничт					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5 Export Classification:	х 65.3 cm / 19 x 14.0 x 25.7 in 3A001 кезани ничт					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5 Export Classification:	х 65.3 cm / 19 x 14.0 x 25.7 in 3A001 кезани ничт					
With Cabinet 50.3 x 35.5 x Without Cabinet 48.3 x 35.5 xport Classification:	x 65.3 cm / 19 x 14.0 x 25.7 ir 3A00					

250S1G6 0.7 - 6 GHz 250 W CW

Rated Power Output	250 W min
Input for Rated Output	1 milliwatt max
Power Output @ 3 dB compression	n Nominal 250 W / min. 225 W
Power Output @ 1 dB compressio	n Nominal 220 W / min. 200 W
Flatness	±1.5 dB typ. / ±2.5 dB max
Frequency Response	0.7–6 GHz instantaneously
Gain (small signal)	54 dB min
Gain Adjustment (continuous rang	ge) 10 dB max (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nomina
Mismatch Tolerance Will operate without damage or any load impedance with	r oscillation when connected to out the aid of foldback circuitry
Modulation Capability Will faithfully reprodu	ce AM, FM, or pulse modulatior appearing on the input signal
	60 dBm typ
Third Order Intercept Point	11
Third Order Intercept Point Noise Figure	10 dB typ
Noise Figure Harmonic Distortion	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,



Primary Power (selected automatically	/)			
	200–250 VAC			
	50/60 Hz, single phase			
	2,500 W max.			
Connectors				
RF input	Type N female			
RF output	Type N female			
Remote Interfaces				
IEEE-488	24–pin			
RS-232	9-pin Subminiature			
RS-232 (fiber optic)	Type ST			
USB 2	Type B			
Ethernet	RJ-45			
Safety Interlock	15–pin Subminiature D			
Cooling Fo	Forced air (self-contained fans)			
Weight				
With Cabinet	64 kg (140 lb.)			
Without Cabinet	50kg (110 lb.)			
Size (WxHxD)	0 (100 100 040)			
	.0 cm / 19.9 x 19.0 x 24.8 in. 58.5 cm / 19.0 x 17.5 x 23 in.			
Export Classification:	3A001			
TYPICAL OUTPUT POWER (Psot 6	0 dBm inpul)			
Fee Searchas Propose Materials Seals (Mily He) Prot Link 50 00W 250W [Timos Mar Ce]	X (this			
450.00				
400.00				
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258.00	~			
200.00				
198.00				

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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

250S1G6C 1 - 6 GHz 250 W CW

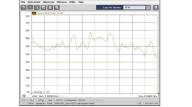
Rated Power Output	250 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	1 Nominal 325 W / min. 225 W
Power Output @ 1 dB compression	
	Nominal 275 W / min. 200 W
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	1.0 – 6 GHz instantaneously
Gain (small signal)	58 dB min.
Gain Adjustment (continuous range	e) 10 dB min. (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nomina
Mismatch Tolerance Will operate without damage or any load impedance witho	oscillation when connected to ut the aid of foldback circuitry.
, ,	e AM, FM, or pulse modulation appearing on the input signal

Third Order Intercept Point	60 dBm typ.				
Noise Figure	10 dB typ.				
Harmonic Distortion					

Entire Band at 200 W except 2-3 GHz; minus 20 dBc max 2-3 GHz; minus 18 dBc max



Spurious	Minus 73 dBc typ.
Primary Power (sel	ected automatically)
	100 – 240 VAC
	47 – 63 Hz, single phase
	1,750 W max
Connectors	
RF input	Type N female
RF output	Type N female
Remote Interfaces	
IEEE-488	24–pir
RS-232	9–pin Subminiature
RS-232 (fiber op	tic) Type ST
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	58. kg (129 lb.)
Without Cabinet	44.9 kg (99 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 47 x 65.3 cm / 19.8 x 18.5 x 25.7 in
Without Cabinet	48.3 x 44.5 x 65.3 cm / 19 x 17.5 x 25.7 in
Export Classificatio	n: 3A001
	TYPICAL PSAT POWER @ 0dBm INPUT
Fie Indrument	Interconnel Softwarker (Mithy Help Sould Prec Clenson 2017



350S1G6A 0.7 - 6 GHz 350 W CW

350 W min.
1 milliwatt max.
@ 3 dB compression Nominal 370 W / min. 315 W
@ 1 dB compression Nominal 300 W / min. 250 W
±1.5 dB typ. / ±2.5 dB max.
0.7–6 GHz instantaneously
56 dB min.
range) 10 dB min. (4096 steps remote)
50 ohms, VSWR 2:1 max
50 ohms, nomina
mage or oscillation when impedance without the aid of ver, mismatch above 6:1 may limit ed power.

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal

Third Order Intercept Point

Harmonic Distortion

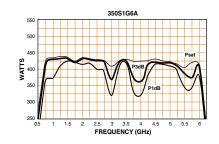
Minus 20 dBc maximum at 300 W (1–6 GHz); Minus 20 dBc typical at 300 W (0.7–1 GHz).

58 dBm typ.

Antennas



Primary Power (selected auto	omatically)
, (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	200–260 VAC 50/60 Hz, single phase
	3,600 W max
Connectors	
RF input	Type N female on rear panel
RF output	Type 7–16 DIN female on rear panel
Safety Interlock	15–pin female subminiature D, rear
Remote computer interface	
IEE	E–488 (GPIB) and RS–232 connector, real
Remote Computer Interface	
IEEE-488	24-pin
RS-232	9-pin Subminiature
RS-232 (fiber optic)	Type ST
USB 2	Type B
Ethernet	RJ-45
Cooling	Forced air (self-contained fans)
Weight	136 kg (300 lb.)
Size (WxHxD)	50.3 x 127 x 61 cm / 19.8 x 50 x 24 in



Product Catalog

2023

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Accessories

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Contents

Find it Fast RF Solid State

Universal Series

Microwave Solid State Pulse TWT

Systems

Contact	AR Companies
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Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

500S1G6A 0.7 - 6 GHz 500 W CW

Rated Power Output	500 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
	Nominal 525 W / min. 475 W
Power Output @ 1 dB compression	
	Nominal 450 W / min. 400 W
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (at max. setting)	57 dB min.
Gain Adjustment (continuous range)	10 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 250 W reflected power.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Third Order Intercept Point Harmonic Distortion Minus 20 dBc max. at 400 W (1-6 GHz);

Minus 20 dBc typ. at 400 W (0.7–1 GHz)

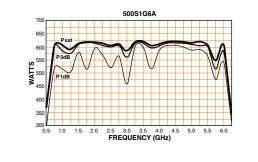
Primary Power (selected automatically)

200-260 VAC 50/60 Hz, single phase 3,800 W

63 dBm tvp.



Type N female on rear pane Type 7–16 DIN female on rear pane
24-pin
9-pin Subminiature
Type ST
Туре В
RJ-45
15–pin Subminiature D, rear
Forced air (self-contained fans)
136 kg (300 lb.)
50.3 x 127 x 61 cm / 19.8 x 50 x 24 in
3A001



500S1G6C 1 - 6 GHz 500 W CW

Rated Power Output	500 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compressi	on Nominal 525 W / min. 475 W
Power Output @ 1 dB compressi	on
	Nominal 450 W / min. 400 W
Flatness	±2.0 dB typ. / ±2.5 dB max.
Frequency Response	1 – 6 GHz instantaneously
Gain (small signal)	61 dB min.
Gain Adjustment (continuous ran	ge) 10 dB min.
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nominal
Mismatch Tolerance	

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 250 W reflected power.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Third Order Intercept	63 dBm typ.				
Harmonic Distortion	Minua 20 dBa may	~+ 400 \// (1	4 (11-)		

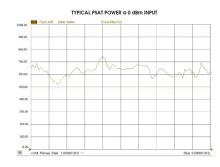
Minus 20 dBc max. at 400 W (1 – 6 GHz); except Minus 18 dBc max. at 400 W (2 - 3 GHz)

Primary Power (selected automatically)

200 – 240 VAC 50/60 Hz, single phase 3,900 W



Connectors RF Input	Type N female on rear pane
RF Output	Type 7–16 DIN female on rear panel
Remote Interfaces	
IEEE-488	24-pin
RS-232	9-pin Subminiature
RS-232 (fiber optic)	, Type ST
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D, rea
Cooling	Forced air (self-contained fans)
Weight	177 kg (390 lb.)
Size (WxHxD)	
	136.0 x 67.1 cm / 22.6 x 53.5 x 26.5 in
Export Classification:	3A001



Product Catalog 2023 For Sales, call: 215.723.8181				723.8181 For	an Applications	s Engineer, call:	800.933.8181	arworld.us		37	
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

750S1G6C 1 - 6 GHz 750 W CW

Rated Power Output	750 W min., 1.0 - 4.2 GHz 500 W min., 4.2 - 6.0 GHz
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
	1 – 4.2 GHz; min. 750 W 4.2 – 6 GHz; min. 550 W
Power Output @ 1 dB compression	
	1 – 4.2 GHz; min. 600 W 4.2 – 6 GHz; min. 450 W
Flatness	±2.0 dB typ. / ±2.5 dB max.
Frequency Response	1 – 6 GHz instantaneously
Gain (small signal)	59 dB min.
Gain Adjustment (continuous range)	10 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 3:1 may limit output to 200 W reflected power.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Third Order Intercept Point

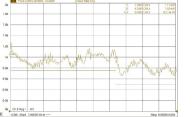
Harmonic Distortion

Minus 20 dBc max. at 600 W (1-6 GHz); except Minus 18 dBc max. at 600 W (2-3 GHz)

67 dBm typ.



Primary Power (select	ed automatically)
	200 – 240 VAC
	50/60 Hz, single phase
	5,200 W
Connectors	
RF Input	Type N female on rear panel
RF Output	Type 7–16 DIN female on rear panel
Remote Interfaces	
IEEE-488	24-pin
RS-232	9-pin Subminiature
RS-232 (fiber optic)	Type ST
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D, rear
Cooling	Forced air (self-contained fans)
Weight	
•	203 kg (448 lb.)
Size (WxHxD)	
57.3	x 136.0 x 67.1 cm / 22.6 x 53.5 x 26.5 in
Export Classification:	3A001
TY	PICAL PSAT POWER @ 0 dBm INPUT
Fiel LinM 0.200W/ 0.00	W/ [Trace Max-On]



1000S1G6C 1 – 6 GHz 1,000 W CW

Rated Power Output	1,000 W min., 1.0 - 5.0 GHz: 700 W min., 5.0 - 6.0 GHz					
Input for Rated Output	1 milliwatt max.					
Power Output	@ 3 dB compression 1 – 5 GHz; Nominal 1,200 W / min. 950 W 5 – 6 GHz; Nominal 800 W / min. 650 W					
Power Output	@ 1 dB compression 1 – 5 GHz; Nominal 950 W / min. 800 W 5 – 6 GHz; Nominal 750 W / min. 600 W					
Flatness	±2.0 dB typ. / ±2.5 dB max.					
Frequency Response	1 – 6 GHz instantaneously					
Gain (small signal)	60 dB min.					
Gain Adjustment (cont	inuous range) 10 dB min.					
Input Impedance	50 ohms, VSWR 2:1 max					
Output Impedance	50 ohms, nominal					

to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 250 W reflected power.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

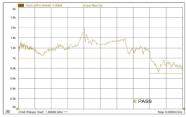
Third Order Intercept Point 68 dBm typ.

Harmonic Distortion

Minus 20 dBc max. at 800 W (1-6 GHz); Except for Minus 18 dBc max. at 800 W (2-3 GHz)



Primary Power						
Low Voltage Version	200 – 240 VAC					
High Voltage Version	380 – 415 VAC					
	47-63 Hz, 3 phase					
	8,500 W					
Connectors						
RF Input	Type N female on rear panel					
RF Output	Type 7–16 DIN female on rear panel					
Remote Interfaces						
IEEE-488	24-pin					
RS-232	9-pin Subminiature					
RS-232 (fiber optic)	Type ST					
USB 2	Type B					
Ethernet	RJ-45					
Safety Interlock	15–pin Subminiature D, rear					
Cooling	Forced air (self-contained fans)					
Weight						
0	273 kg (600 lb.)					
Size (WxHxD)						
	57.3 x 136 x 95.5 cm / 22.6 x 53.5 x 37.6 in.					
Export Classification:	3A001					
	TYPICAL PSAT POWER @ 0 dBm					
Psat Linki 0 200kW	0.00KW [Trace Max On]					



(9)	Proc	Product Catalog 2023 For Sales, call: 215.723.8181 For an Applications Engineer, call: 800.933.8181					800.933.8181	arworld.us		38	
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range **0.7 – 18 GHz**

Power Range **15 - 2000 W**

2000S1G2z8 1 - 2.8 GHz 2000 W CW

Rated Power Output	2,000 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	1
	Nominal 2,400 W / min. 1,800 W
Power Output @ 1 dB compression	1
	Nominal 1,800 W / min. 1,500 W
Flatness	±1.5 dB typ. / ±2.0 dB max.
Frequency Response	1 – 2.8 GHz instantaneously
Gain (small signal)	67 dB min.
Gain Adjustment (continuous range	e) 10 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 1,000 W reflected power.

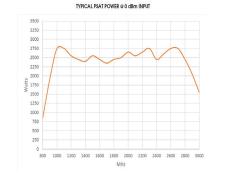
Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Third Order Intercept Point	70 dBm typ.				
	Harmonic Distortion Minus 20 dBc max. at 1,500 W				
Primary Power Low Voltage Version	200 – 240 VAC				
High Voltage Version	380 – 415 VAC 47 – 63 Hz				
	15,000 W				



Connectors	
RF Input	Type N female on rear panel
RF Output	Type 1-5/8 EIA female on rear panel
Remote Interfaces	
IEEE-488	24-pin
RS-232	9-pin Subminiature
RS-232 (fiber optic)	. Type ST
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D, rear
Cooling	Forced air (self-contained fans)
Weight	363 kg (800 lb.)
Size (WxHxD)	
57.3 x 19	93.8 x 103.1 cm / 22.6 x 76.3 x 40.6 in
Export Classification:	3A001
xport Classification:	3A001



125S1G2z5 1 – 2.5 GHz 125 W CW

140 W typ., 125 W min.
1 milliwatt max.
on Typ. 130 W, min. 115 W
on Typ. 110 W, min. 90 W
±1.5 dB typ. / ±2 dB max.
1 – 2.5 GHz instantaneously
54 dB min.
ge) 20 dB min.
50 ohms, VSWR 2:1 max.
50 ohms, nominal
or oscillation when connected to ne aid of foldback circuitry.
N, or pulse modulation

Third Order Intercept Point	60 dBm typ. 12 dB max.; 10 dB typ. Minus 20 dBc max. at 100 W Minus 30 dBc typ. at 100 W					
Noise Figure						
Harmonic Distortion						
Spurious	Minus 73 dBc typ.					
Primary Power (selected automation	cally) 100 – 240 VAC 50/60 Hz 650 W					



Connectors	
RF input	Type N female
RF output	Type N female
Remote Interfaces	
IEEE-488	24–pin female
RS-232	9–pin Subminiature D (female)
Fiber optic:	ST Conn Tx and Rx RS-232
USB 2 Ethernet	Type B RJ-45
Safety Interlock	15-pin Subminiature D
Cooling	Forced air (self-contained fans)
Acoustical Noise @	1 Meter Front: 60 dBA
	Side: 59 dBA
	Rear: 66 dBA
Weight	
With Cabinet	36.7 kg (81 lb.)
Without Cabinet	25.4 kg (56 lb.)
Size (WxHxD)	
With cabinet	50.3 x 20.5 x 74.9 cm / 19.8 x 8.1 x 29.5 in
Without Cabinet	48.3 x 17.7 x 74.9 cm / 19 x 7 x 29.5 in
Environmental	Storage Temperature –20°C/+50°C
Export Classification	: EAR99
	125S1G2z5
170	
155	Past
og 140	P 3dB
SLIEW 125	



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

250S1G2z5B 1 – 2.5 GHz 250 W CW

Rated Power Output	300 W typ., 250 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
	Typ. 275 W, min. 250 W
Power Output @ 1 dB compression	
• · ·	Typ. 225 W, min. 200 W
Flatness	± 1.5 dB typ. / ± 2 dB max.
Frequency Response	1 – 2.5 GHz instantaneously
Gain (at max. setting)	56 dB min.
Gain Adjustment (continuous range)) 20 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
Mismatch Toloranoo	

Mismatch Tolerance

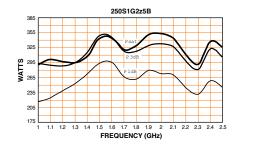
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

, ,	ace AM, FM, or pulse modulation appearing on the input signal. 62 dBm typ.					
Third Order Intercept Point						
Noise Figure	12 dB max.; 10 dB typ.					
Harmonic Distortion	Minus 20 dBc max. at 200 W Minus 30 dBc typ. at 200 W					
Spurious	Minus 73 dBc typ.					
Primary Power (selected automatica	ally) 100 – 240 VAC 50/60 Hz, single phase 1,200 W max.					



Connectors	
RF input	Type N female on front pane
RF output	Type N female on front panel
Remote Interfaces	
IEEE-488	24–pin female
RS-232	9-pin Subminiature D (female)
Fiber optic:	ST Conn Tx and Rx RS-232
USB 2	Type B
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	
With Cabinet	42.6 kg (94 lb.)
Without Cabinet	31.3 kg (69 lb.)
Size (WxHxD)	
With cabinet	50.3 x 20.5 x 74.9 cm / 19.8 x 8.1 x 29.5 in
Without Cabinet	48.3 x 17.7 x 74.9 cm / 19 x 7 x 29.5 in
Export Classification	n: FAR99

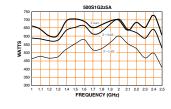


500\$1G2z5A 1 – 2.5 GHz 500 W CW

Rated Power Output	550 W nominal, 500 W min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	1 Nominal 550 W / min. 450 W
Power Output @ 1 dB compression	1 Nominal 400 W / min. 350 W
Flatness	±1.5 dB typ. / ±2 dB max.
Frequency Response	1 – 2.5 GHz instantaneously
Gain (small signal)	57 dB min.
Gain Adjustment (continuous range	e) 20 dB min. (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nominal
Mismatch Tolerance Will operate without damage or any load impedance without the	
	e AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	66 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 350 W Minus 20 dBc typ. at 500 W
Spurious	Minus 73 dBc typ.
Primary Power (selected automatic	ally) 100 – 240 VAC 50/60 Hz 2,250 W max.



Connectors	
RF input	Type N female
RF output	Type 7-16 DIN female
Remote Interfaces	24-pin female
RS-232	9–pin Subminiature D (female)
Fiber Optic USB 2 Ethernet	ST Conn Tx and Rx RS-232 Type F RJ-45
Safety Interlock	15–pin Subminiature E
Cooling	Forced air (self-contained fans
Acoustical Noise @ 1	Meter Front: 56 dBA type
Weight	
With Cabinet	64.9 kg (143 lb.)
Without Cabinet	50.3 kg (111 lb.)
Size (WxHxD)	
With cabinet:	50.3 x 37.3 x 74.9 cm (19.8 x 14.7 x 29.5 in)
Without Cabinet:	48.3 x 35.5 x 74.9 cm (19 x 14 x 29.5 in
Environmental	Storage Temperature –20°C/+50°C
Export Classification:	EAR99



()	Prod	luct Catalog	2023 For Sc	iles, call: 215.7	723.8181 For	an Applications	Engineer, call:	800.933.8181	arworld.us		40
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

1000S1G2z5B 1 – 2.5 GHz 1000 W CW

Rated Power Output		1000 W min.
Input for Rated Output (0 dB	3m)	1 milliwatt max.
Power Output @ 3 dB comp	ression	Nominal 1000 W / min. 925 W
Power Output @ 1 dB comp	ression	Nominal 850 W / min. 725 W
Flatness		±1.5 dB typ. / ±2 dB max.
Frequency Response		1 – 2.5 GHz instantaneously
Gain (at max. setting)		60 dB min.
Gain Adjustment (continuou	is range)	20 dB min. (4096 steps remote)
Input Impedance		50 ohms, VSWR 2:1 max.
Output Impedance		50 ohms, nominal
Mismatch Tolerance Will operate without dama load impedance without		cillation when connected to any foldback circuitry.
Modulation Capability		fully reproduce AM, FM, or pulse n appearing on the input signal.
Third Order Intercept Point		66 dBm typ.
Noise Figure		10 dB typ.
Harmonic Distortion		Minus 20 dBc max. at 800 W Minus 20 dBc typ. at 1000 W

Minus 73 dBc typ. Spurious 200 – 240 VAC

Primary Power (selected automatically) 50/60 Hz, single phase



Connectors	
RF input RF output	Type N female on rear panel Type 7/8 EIA female on rear panel
·	
Remote Interfaces IEEE-488	24-pin female
RS-232	9-pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2	Туре В
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Acoustical Noise @ 1 Meter	r Front: 44 dBA Side: 68 dBA Rear: 72 dBA
Weight	148 kg (325 lbs)
Size (WxHxD) 56.1 x 97	7.8 x 82.5 cm / 22.1 x 38.5 x 32.5 in
Environmental Storage Temperature	–20°C/+50°C
Export Classification:	EAR99
	S1G2z5B Typical Output Power
1400	
1300	Plat
1150	
1050 1000	Plda
950	\times / \times $$

.

900 850 850

3800 W

20\$6G18C 6 - 18 GHz 20 W CW

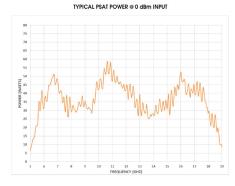
20 W min.
1 milliwatt max., 0 dBm
Nominal 25 W / min. 18 W
Nominal 22 W / min. 15 W
±2 dB typ. / ±2.5 dB max.
6 – 18 GHz instantaneously
45 dB min.
10 dB min.
50 ohms, VSWR 2.5:1 max
50 ohms, nominal
oscillation when connected to t the aid of foldback circuitry.

Will faithfully rep	roduce AM, FM, or pulse modulation appearing on the input signal.					
Third Order Intercept Point	49 dBm typ.					
Harmonic Distortion	Minus 20 dBc max. at 20 W					
Primary Power (selected auto	matically) 100 - 240 VAC 50/60 Hz, single phase 600 W max.					
Connectors RF input	Precision N female on front panel					

Precision N female on front panel Precision N female on front panel



Remote Interfaces IEEE-488 RS-232 RS-232 (fiber optic) USB 2 Ethernet	24–pin female 9–pin Subminiature D (female) Type ST Type B RJ–45
Safety Interlock	15–pin Subminiature D
Cooling Weight	Forced air w/cabinet: 29.5 (65 lb.) w/o cabinet: 20.4 kg (45 lb.)
	20.6 x 63.8 cm (19.8 x 8.1 x 25.1 in.) 3 x 18.8 x 63.8 cm (19 x 7 x 25.1 in.)
Export Classification:	3A001



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

RF output

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

40S6G18C 6 - 18 GHz 40 W CW

Dated Device Output	10 W/ min
Rated Power Output	40 W min.
Input for Rated Output	1 milliwatt max., 0 dBm
Power Output @ 3 dB compression	
·	Nominal 55 W / min. 35 W
Power Output @ 1 dB compression	
	Nominal 45 W / min. 25 W
Power Gain Flatness (0 dBm IN)	± 2 dB typ. / ± 3.0 dB max.
Frequency Response	6 – 18 GHz instantaneously
Gain (small gain)	51 dB min.
Gain Adjustment (continuous range)	10 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation	
appearing on the input signal.	

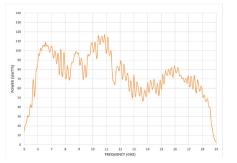
Third Order Intercept Point	52 dBm typ.
Harmonic Distortion Minus 20 dBc max. at 4	
Primary Power (selected auto	omatically)
	100 - 240 VAC
	50/60 Hz, single phase
	700 W max.
Connectors	
RF input	Precision N female on front panel
RF output	Precision N female on front panel



Remote Interfaces IEEE-488 RS-232 RS-232 (fiber optic) USB 2 Ethernet	24-pin female 9-pin Subminiature D (female) Type ST Type B RJ-45 RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air
Weight	w/cabinet: 31.75 (70 lb.) w/o cabinet: 22.7kg (50 lb.)

w/o cabinet: 48.3 x 18.8 x 63.8 cm (19 x 7 x 25.1 in.) Export Classification: 3A001

TYPICAL PSAT POWER @ 0 dBm INPUT



75S6G18C 6 - 18 GHz 75 W CW

Rated Power Output	75 W min.
Input for Rated Output	1 milliwatt max., 0 dBm
Power Output @ 3 dB compression	
Nominal 110 W	/ min. 75 W, 6.0 - 12.0 GHz / min. 65 W, 12.0 - 18.0 GHz
Power Output @ 1 dB compression	
Nominal 80 W	/ min. 60 W, 6.0 - 12.0 GHz / min. 50 W, 12.0 - 18.0 GHz
Power Gain Flatness (0 dBm IN)	±2.5 dB typ. / ±3.5 dB max.
Frequency Response	6 – 18 GHz instantaneously
Gain (small signal)	50 dB min.
Gain Adjustment (continuous range) 10 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Third Order Intercept Point 54 dBm typ.

Harmonic Distortion

Minus 20 dBc max. at 75 W (6.0 - 12.0 GHz) Minus 20 dBc max. at 65 W (12.0 – 18.0 GHz)

Primary Power (selected automatically)

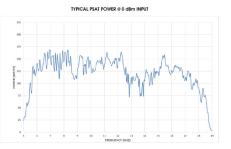
100 - 240 VAC 50/60 Hz, single phase 1200 W max.



Connectors	
RF input	Precision N female on front panel
RF output	Precision N female on front panel
Remote Interfaces	
IEEE-488	24–pin female
RS-232	9-pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2	Type B
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air
Weight	w/cabinet: 35 (77 lb.)
•	w/o cabinet: 25.9 kg (57 lb.)
Size (WxHxD)	
	x 20.6 x 63.8 cm (19.8 x 8.1 x 25.1 in.) 3.3 x 18.8 x 63.8 cm (19 x 7 x 25.1 in.)

Export Classification:

3A001



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 0.7 - 18 GHz

Power Range 15 - 2000 W

125S6G18C 6 - 18 GHz 125 W CW

Rated Power Output	125 W min. (6.0 - 12.0 GHz) 100 W min. (12.0 - 18.0 GHz)
Input for Rated Output	1 milliwatt max., 0 dBm
Power Output @ 3 dB compression	
Nominal 175 V	V / min. 125 W (6.0 - 12.0 GHz) / min. 100 W (12.0 - 18.0 GHz)
Power Output @ 1 dB compression	
	V / min. 100 W (6.0 - 12.0 GHz) V / min. 75 W (12.0 - 18.0 GHz)
Power Gain Flatness (0 dBm IN)	±2.5 dB typ. / ±3.5 dB max.
Frequency Response	6 – 18 GHz instantaneously
Gain (Small Signal)	52 dB min.
Gain Adjustment (continuous range)	10 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 65 watts reflected power.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal. 56 dBm typ.

Third Order Intercept Point

Harmonic Distortion @ 125 W, 6.0 - 12.0 GHz, @ 100 W, 12.0 -18.0 GHz

Minus 20 dBc max



Primary Power (selected aut	tomatically)		
	200 - 240 VAC 50/60 Hz, single phase 2750 W max.		
Connectors			
RF input RF output	Precision N female WRD650 (50 Ω), rear		
Remote Interfaces			
IEEE-488	24-pin female		
RS-232	9-pin Subminiature D (female)		
RS-232 (fiber optic)	Type ST		
USB 2	Туре В		
Ethernet	RJ-45		
Safety Interlock	15–pin Subminiature D		
Cooling	Forced air		
Weight	w/cabinet: 84.4 (186 lb.) w/o cabinet: 55.3kg (122 lb.)		
Size (WxHxD)			
	.9 x 95.5 cm (22.6 x 38.5 x 37.6 in.)		
	.3 x 95.5 cm (19.0 x 21.0 x 37.6 in.)		
Export Classification:	3A001		
TYPICAL F	SAT POWER @ 0dBm INPUT		
400.00			
350.00			
300.00			
250.00	mante ma		
	and and		

0.00 5 6 7 8 9 10 11 12

250S6G18C 6 - 18 GHz 250 W CW

Rated Power Output	250 W min. (6.0 - 12.0 GHz) 200 W min. (12.0 - 18.0 GHz)
Input for Rated Output	1 milliwatt max., 0 dBm
Power Output @ 3 dB compres	sion
Nominal 300	W / min. 250 W, 6.0 - 12.0 GHz W / min. 200 W, 12.0 - 18.0 GHz
Power Output @ 1 dB compres	sion
Nominal 250	W / min. 200 W, 6.0 - 12.0 GHz W / min. 150 W, 12.0 - 18.0 GHz
Power Gain Flatness (0 dBm IN)) ±2 dB typ. / ±3.5 dB max.
Frequency Response	6 – 18 GHz instantaneously
Gain (Small Signal)	55 dB min.
Frequency Response Gain (Small Signal) Gain Adjustment (continuous ra Input Impedance	6 – 18 GHz instantaneously 55 dB min. nge) 10 dB min. 50 ohms, VSWR 2.5:1 max.

Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6:1 may limit output to 125 watts reflected power.

Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

Third Order Intercept Point	59 dBm typ.
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Harmonic Distortion

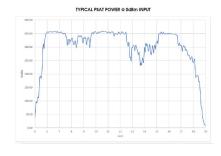
Minus 20 dBc max. at 250 W (6.0 - 12.0 GHz), Minus 20 dBc max. at 200 W (12.0 - 18.0 GHz)



Primary Power (selected autor	matically)
, ,	200 - 240 VAC 50/60 Hz, single phase 4500 W max.
Connectors RF input RF output	Precision N female on front panel WRD650 (50 Ω), rear
Remote Interfaces IEEE-488 RS-232 RS-232 (fiber optic) USB 2 Ethernet	24–pin female 9–pin Subminiature D (female) Type ST Type B RJ–45
Safety Interlock	15-pin Subminiature D
Cooling Weight	Forced air w/cabinet: 117 (258 lb.) w/o cabinet: 88 kg (194 lb.)
	.9 x 95.5 cm (22.6 x 38.5 x 37.6 in.) 3.3 x 95.5 cm (19.0 x 21.0 x 37.6 in.)

Export Classification:

3A001



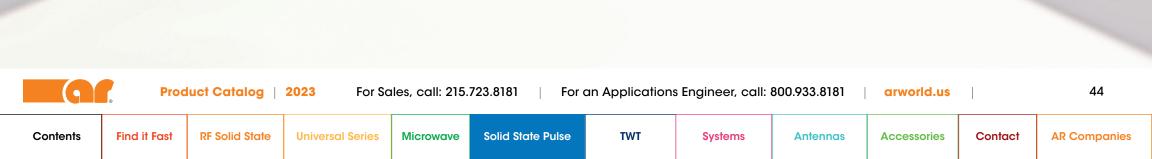
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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Solid State Pulse Amplifiers

For automotive and military EMC radiated immunity susceptibility testing, as well as radar and communication applications, Solid State Pulsed Amplifiers offer high-power RF levels that rival those of TWTs. However, they offer higher reliability, better mismatch tolerance, much better harmonic distortion, and better MTBF (Mean Time Between Failure) than TWTs.



1300SP1G2



Frequency Range 1 - 4 GHz

Power Range 1 - 18 kW

1000SP0z8G2z5 0.8 - 2.5 GHz

1000 W Pulse

Delay

Pulse Width Distortion

Pulse Off Isolation

Harmonic Distortion

Pulse Input

Noise Figure

Rated Power Output	1000 W min.
Input for Rated Output	1.0 milliwatt maximum
Flatness	±2.5 dB maximum
Frequency Response	0.8 – 2.5 GHz instantaneously
Gain (small signal)	60 dB min
Gain Adjustment Continuous I	Range 20 dB min.,(4096 steps remote)
Input Impedance	50 ohms, VSWR 2.0:1 max
Output Impedance	50 ohms, nomina
any load impedance Alarm	nange or oscillation when connected to a and protection above 250 W reflected d VSWR > 3:1 at 1 kW; > 6:1 at 500 W
Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall	0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10% – 90%)

1 µs max. from pulse input to RF 90%

TTL level, 50 ohm nominal termination

 \leq -20 dBc max. up to 2.5 GHz

(difference between TTL Input Gate and RF pulse)

 \leq -15 dBc max. up to 1.4 GHz @ RF power \geq 800 W

±25 ns max.

60 dB min.

 \leq 12 dB max.

Dutpt 600

Spurious	-60 dBc max
Primary Power	100 – 264 VAC 50 – 60 Hz, single phase 700 W max.
Connectors RF input RF output RF sample reflected	Type N female on front panel Type N female on front panel Type N female, forward and
Pulse input	Type BNC female on rear panel
Remote Interfaces IEEE-488	24–pin on rear panel
Ethernet RS-232	RJ–45 on rear panel 9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	43 kg (95 lb.)
Size (WxHxD)	50.3 x 19.8 x 71.4 cm, 19.8 x 7.8 x 28.1 in
Export Classification	1 3A999.d
	Typical Output Power (Psat @ 0 dBm input)
1 800 1 600 1 400 1 1 200 9 1 200 1 9 800	an many many

1400 1600 1800 2000 2200 2400 2600 Frequency (MHz)

2000SP0z8G2z5 0.8 - 2.5 GHz 2000 W Pulse

Rated Power Output	2000 W min.				
Input for Rated Output	0 dBm ma				
Flatness	± 1.5 dB typ.; ± 2,5 dB max.				
Frequency Response	0.8 – 2.5 GHz instantaneously				
Gain (Small Signal))	63 dB min.				
Gain Adjustment	20 dB min (4096 step)				
Input Impedance	50 ohms, VSWR 2:1 max.				
Output Impedance	50 ohms, nominal				

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance. Alarm and protection above 500 W reflected power (i.e., load VSWR > 3:1 @ 2 kW; VSWR > 6:1 @ 1 kW)

Pulse Capability

Pulse Width	0.1 – 100 microseconds
Pulse Rate (PRF)	50 kHz max.
Duty Cycle	5% max.
RF Rise and Fall	30 ns max. (10% – 90%)
Delay	1 µs max. from pulse input to RF 90%
Pulse Width Distortion	n ±25 ns max.
(differe	nce between TTL Input Gate and RF pulse)
Pulse Off Isolation	60 dB min.
Pulse Input	TTL level, 50 ohm nominal termination

Noise Figure

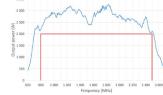
Harmonic Distortion

 \leq -15 dBc max. up to 1.4 GHz @ RF power \geq 1600 W \leq -20 dBc max. up to 2.5 GHz

 \leq 12 dB max.



Spurious	-60 dBc max
Primary Power	100 – 264 VAC
	50 – 60 Hz, single phase 1000 W max
Connectors	
RF input	Type N female on front pane
RF output	Type N female on front pane
RF output	forward and reflected sample ports Type N female on rear pane
Pulse input	Type BNC female on rear pane
Remote Interfaces	
IEEE-488	24–pin on rear pane
Ethernet	RJ–45 on rear pane
RS-232	9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	45 kg (99 lb.)
Size (WxHxD)	
	50.3 x 19.8 x 71.4 cm / 19.8 x 7.8 x 28.1 ir
Export Classification	3A999.c
	Typicol Output Power (Paot © 0 dBm Input)
3 500	mum were



9	Proc	luct Catalog	2023 For Sc	ales, call: 215.	723.8181 For	an Applications	Engineer, call:	800.933.8181	arworld.us		45
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 1 - 4 GHz

Power Range 1 - 18 kW

4000SP0z8G2z5

0.8 - 2.5 GHz 4000 W Pulse

Rated Power Output	4000 W min.
Input for Rated Output	0 dBm max.
Flatness	± 1.5 dB typ.; ± 2,5 dB max.
Frequency Response	0.8 – 2.5 GHz instantaneously
Gain (small signal)	66 dB min.
Gain Adjustment	20 dB min (4096 step)
Input Impedance	50 ohms, VSWR \leq 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance. Alarm and protection above 1 kW reflected power (i.e. load VSWR > 3:1 @ 4 kW: VSWR > 6:1 @ 2 kW)

Pu	lse	e C	aļ	Da	bil	ity

L level, 50 ohm nominal termination ≤ 12 dB max.
L level, 50 ohm nominal termination
60 dB min.
etween TTL Input Gate and RF pulse)
±25 ns max.
µs max. from pulse input to RF 90%
30 ns max. (10% – 90%)
5% max.
50 kHz max.
0.1 – 100 microseconds

≤ -15 dBc max. up t	to 1.4 GHz @ RF power ≥ 3200 \
	\leq -20 dBc max. up to 2.5 GH

```
Spurious
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W Hz -60 dBc max.



Primary Power	100 – 264 VAC
	50 – 60 Hz
	1800 W max.
Connectors	
RF input	Type N female on front pane
RF output	Type 7–16 DIN female on front panel
RF output	forward and reflected sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear pane
Remote Interfaces	
IEEE-488	24–pir
Ethernet	RJ-45 on rear pane
RS-232	9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	86 kg (190 lb.)
Size (WxHxD)	
	50.3 x 53.3 x 83.8 cm / 19.8 x 21 x 33 ir
	3A999 c

8000SP0z8G2z5 0.8 - 2.5 GHz 8000 W Pulse

Rated Power Output	8000 W min.
Input for Rated Output	0 dBm max
Flatness	± 1.5 dB typ.; ± 2,5 dB max
Frequency Response	0.8 – 2.5 GHz instantaneously
Gain (small signal)	69 dB min
Gain Adjustment	20 dB min (4096 step)
Input Impedance	50 ohms, VSWR ≤ 2:1 max.
Output Impedance	50 ohms, nomina
to any load imp	ut damage or oscillation when connected edance. Alarm and protection above 2 kM , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW
to any load imp reflected power (i.e.	edance. Ălarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @
to any load imp reflected power (i.e. Pulse Capability Pulse Width	edance. Ålarm and protection above 2 kM , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds
to any load imp reflected power (i.e. Pulse Capability Pulse Width Pulse Rate (PRF)	edance. Ålarm and protection above 2 kM , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW
to any load imp reflected power (i.e. Pulse Capability Pulse Width	edance. Ålarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10%–90%)
to any load imp reflected power (i.e. Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay	edance. Ålarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10%–90%) 1 μs max. from pulse input to RF 90%
to any load imp reflected power (i.e. Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortior	edance. Ålarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10%–90%) 1 µs max. from pulse input to RF 90% 1 µs max.
to any load imp reflected power (i.e. Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortior (differen	edance. Ålarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10%–90%) 1 µs max. from pulse input to RF 90% 1 ±25 ns max nce between TTL Input Gate and RF pulse)
to any load imp reflected power (i.e. Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortior (differer Pulse Off Isolation	edance. Ålarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10%–90%) 1 µs max. from pulse input to RF 90% 1 ±25 ns max nce between TTL Input Gate and RF pulse) 60 dB min.
to any load imp reflected power (i.e. Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortior (differen Pulse Off Isolation Pulse Input	edance. Ålarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10%–90%) 1 µs max. from pulse input to RF 90% 1 ±25 ns max nce between TTL Input Gate and RF pulse)
to any load imp reflected power (i.e. Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortior (differer Pulse Off Isolation Pulse Input	edance. Ålarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10%–90%) 1 µs max. from pulse input to RF 90% 1 ±25 ns max nce between TTL Input Gate and RF pulse) 60 dB min. TTL level, 50 ohm nominal termination
to any load imp reflected power (i.e. Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortion (differer Pulse Off Isolation Pulse Input Noise Figure Harmonic Distortion	edance. Ålarm and protection above 2 kW , load VSWR > 3:1 @ 8 kW; VSWR > 6:1 @ 4 kW 0.1 – 100 microseconds 50 kHz max 5% max 30 ns max. (10%–90%) 1 µs max. from pulse input to RF 90% 1 ±25 ns max nce between TTL Input Gate and RF pulse) 60 dB min. TTL level, 50 ohm nominal termination



Spurious	-60 dBc max
Primary Power	100 – 264 VAC 50 – 60 Hz, single phase 2500 W max.
Connectors RF input RF output RF output	Type N female on rear pane Type 7–16 DIN female on rear pane forward and reflected sample ports Type N female on rear pane
Pulse input	Type BNC female on rear panel
Remote Interfaces IEEE-488 Ethernet RS-232	24–pin RJ–45 on rear pane 9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self–contained fans)
Weight	137 kg (301 lb.)
Size (WxHxD)	50.3 x 53.3 x 83.8 cm / 19.8 x 21 x 33 ir
Export Classification	3A999.d

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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 1 – 4 GHz Power Range **1 - 18 kW**

1300SP1G2 1 - 2 GHz 1300 W Pulse

1,300 W min
1 milliwatt max
±1.5 dB typ. / ±2.5 dB max
1 – 2 GHz instantaneously
61.2 dB min
s Range 20 dB min., (4096 steps remote)
50 ohms, VSWR 2:1 max
50 ohms, nomina
ad VSWR > 3:1 @ 1.3 kW; >6:1 @ 650 W
50 kHz max
6% max
30 ns max. (10% – 90%) 1 µs max. from pulse input to RF 90%
±25 ns max
nce between TTL Input Gate and RF pulse)
60 dB min.
TTL level, 50 ohm nominal termination
<12 dB max
–15 dBc max. up to 1.2 GHz @800W
-20 dBc max from 1.2 GHz-2 GHz



Spurious	Minus 60 dBc max
Primary Power	100 – 264 VAC
	50/60 Hz, single phase
	500 W max.
Connectors	
RF input	Type N female on front panel
RF output	Type N female on front panel
RF output forward and reflected	sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
IEEE-488	24-pin
Ethernet	RJ-45
RS-232	9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self–contained fans)
Weight	35 kg (76 lb.)
Size (WxHxD)	
Size (WxHxD) 50.3 x 19.8 x	71.4 cm / 19.8 x 7.8 x 28.1 in

2000SP1G2 1 - 2 GHz 2000 W Pulse

Rated Power Output	2000 W min.
Input for Rated Output	t 1 milliwatt max.
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	1 – 2 GHz instantaneously
Gain (Small Signal)	63 dB min.
Gain Adjustment Continuo	ous Range 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
any load impedanc	50 ohms, nominal t damage or oscillation when connected to e. Alarm and protection above 500 W ad VSWR > 3:1 @ 2 kW; >6:1 @ 1 kW).
Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortie ±25 ns max	. (difference between TTL Input Gate and RF
Pulse Off Isolation Pulse Input	pulse) 60 dB min. TTL level, 50 ohm nominal termination
Noise Figure	<12 dB max.
Harmonic Distortion	–15 dBc max. up to 1.2 GHz (@ ≥1300 W); –20 dBc max. up to – 2 GHz
Spurious	Minus 60 dBc max



Primary Power	100 – 264 VAO
1	50/60 Hz, single phase
	800 W max
Connectors	
RF input	Type N female on front pane
RF output	Type N female on front pane
RF output forward and	I reflected sample ports
·	Type N female on rear pane
Pulse input	Type BNC female on rear pane
Remote Interfaces	
IEEE-488	24-pir
Ethernet	RJ-45
RS-232	9-pin subminiature [
Safety Interlock	15–pin Subminiature E
Cooling	Forced air (self-contained fans
Weight	35 kg (76 lb.
Size (WxHxD)	
Ę	50.3 x 19.8 x 71.4cm / 19.8 x 7.8 x 28.1 in
Export Classification	34999 (

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Frequency Range 1 – 4 GHz

Power Range 1 - 18 kW

4000SP1G2 1 - 2 GHz 4000 W Pulse

•	4000 W min.
Input for Rated Output	1 milliwatt max.
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	1 – 2 GHz instantaneously
Gain (Small Signal)	66 dB min.
Gain Adjustment Continuou	s Range 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
Pulse Capability	r (load VSWR > 3:1 @ 4 kW; >6:1 @ 2 kW
Pulse Width	0.1 – 50 microseconds
Pulse Rate (PRF)	0.1 – 50 microseconds 50 kHz max.
Pulse Rate (PRF) Duty Cycle	50 kHz max. 6% max.
Pulse Rate (PRF) Duty Cycle RF Rise and Fall	50 kHz max. 6% max. 30 ns max. (10% to 90%)
Pulse Rate (PRF) Duty Cycle	50 kHz max. 6% max. 30 ns max. (10% to 90%) 1 µs max. from pulse input to RF 90%
Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortion	50 kHz max. 6% max. 30 ns max. (10% to 90%) 1 µs max. from pulse input to RF 90% n ux. (difference between TTL Input Gate and
Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortion	50 kHz max. 6% max. 30 ns max. (10% to 90%) 1 µs max. from pulse input to RF 90%
Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortion ±25 ns mo	50 kHz max. 6% max. 30 ns max. (10% to 90%) 1 µs max. from pulse input to RF 90% n ux. (difference between TTL Input Gate and RF pulse)
Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortion ±25 ns mo Pulse Off Isolation	50 kHz max 6% max 30 ns max. (10% to 90%) 1 µs max. from pulse input to RF 90% n ux. (difference between TTL Input Gate and RF pulse) 60 dB min
Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortion ±25 ns mc Pulse Off Isolation Pulse Input Noise Figure Harmonic Distortion	50 kHz max 6% max 30 ns max. (10% to 90%) 1 µs max. from pulse input to RF 90% n IX. (difference between TTL Input Gate and RF pulse) 60 dB min TTL level, 50 ohm nominal termination

100 - 264 VAC **Primary Power** 50/60 Hz, single phase 1,500 W max. Connectors RF input Type N female on front panel RF output Type 7–16 DIN female on front panel RF output forward and reflected sample ports Type N female on rear panel Type BNC female on rear panel Pulse input Remote Interfaces IEEE-488 24-pin Ethernet RJ-45 RS-232 9-pin subminiature D Safety Interlock 15-pin Subminiature D Cooling Forced air (self-contained fans) Weight 92 kg (201 lb.) Size (WxHxD) 50.3 x 53.3 x 83.8 cm / 19.8 x 21 x 33 in. 3A999.d Export Classification

8000SP1G2 1 - 2 GHz 8000 W Pulse

Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortion (different	0.1 – 50 microseconds 50 kHz max. 6% max. 30 ns max. (10% – 90%) 1 µs max. from pulse input to RF 90% ±25 ns max. nce between TTL Input Gate and RF pulse)
Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay	50 kHz max. 6% max. 30 ns max. (10% – 90%) 1 µs max. from pulse input to RF 90%
Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall	50 kHz max. 6% max. 30 ns max. (10% – 90%)
Pulse Width Pulse Rate (PRF) Duty Cycle	50 kHz max.
Pulse Width	
	0.1 - 50 microseconds
to any load impedan	amage or oscillation when connected ce. Alarm and protection above 2 kW VSWR > 3:1 @ 8 kW; >6:1 @ 4 kW)
Output Impedance	50 ohms, nominal
Input Impedance	50 ohms, VSWR 2:1 max.
Gain Adjustment Continuou:	s Range 20 dB min., (4096 steps remote)
Gain (Small Signal)	69 dB min.
Frequency Response	1–2 GHz instantaneously
Flatness	± 1.5 dB typ./ ± 2.5 dB max.
	1 milliwatt max.
Input for Rated Output	



Primary Power	100 – 264 VAC
	50/60 Hz,
	2400 W max
Connectors	
RF input	Type N female on front panel
RF output	Type 7–16 DIN female on rear panel
RF output forward and refle	cted sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
IEEE-488	24-pin
Ethernet	RJ-45
RS-232	9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	122 kg (268 lb.)
Size (WxHxD)	
	50.3 x 53.3 x 83.8 cm / 19.8 x 21 x 33 in
Export Classification	3A999.d

(9)	B

Spurious

Product Catalog 2023

Minus 60 dBc max.

For Sales, call: 215.723.8181

For an Applications Engineer, call: 800.933.8181

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Contents **Find it Fast** **RF Solid State Universal Series**

Solid State Pulse Microwave

TWT

Systems

Antennas Accessories Contact **AR Companies**

Frequency Range 1 - 4 GHz

Power Range 1 - 18 kW

4000SP1z2G1z4 1.2 - 1.4 GHz 4000 W Pulse

Rated Power Output	4000 W min.
Input for Rated Output	1 milliwatt max.
Flatness	±1 dB typ./±2 dB max.
Frequency Response	1.2 – 1.4 GHz instantaneously
Gain (Small Signal)	66 dB min.
Gain Adjustment Continuous Range	20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance. Alarm and protection above 1 kW reflected power (load VSWR > 3:1 @ 4 kW; >6:1 @ 2 kW)

Pulse	Capability	
	147 111	

ruise oupublility	
Pulse Width	0.1 – 50 microseconds
Pulse Rate (PRF)	50 kHz max.
Duty Cycle	6% max.
RF Rise and Fall	30 ns max. (10% – 90%)
Delay	1 µs max. from pulse input to RF 90%
Pulse Width Distortion	±25 ns max.
(differenc	e between TTL Input Gate and RF pulse)
	RF pulse)
Pulse Off Isolation	60 dB min.
Pulse Input	TTL level, 50 ohm nominal termination
Noise Figure	8 dB max.
Harmonic Distortion	Minus 30 dBc max. @ rated power
Spurious	Minus 60 dBc max.



Primary Power	100 – 264 VAC
	50/60 Hz, single phase
	1100 W max
Connectors	
RF input	Type N female on front pane
RF output	Type 7–16 DIN female on front panel
	and reflected sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear pane
Remote Interfaces	
IFFF-488	24-pir
Ethernet	R.J-45
RS-232	9-pin subminiature E
K3-Z3Z	9-piit subminiulule L
Safety Interlock	15-pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	35 kg (76 lb.)
Size (WxHxD)	
	50.3 x 19.8 x 71.4 cm / 19.8 x 7.8 x 28.1 in
Export Classification	3A999.c
•	

6000SP1z2G1z4 1.2 – 1.4 GHz 6000 W Pulse

Rated Power Output	6000 W min
Input for Rated Output	1 milliwatt max
Flatness	±1 dB typ. / ±2 dB max
Frequency Response	1.2 – 1.4 GHz instantaneously
Gain (Small Signal)	67.8 dB min
Gain Adjustment Continuou	ıs Range 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, nomina
Pulse Capability Pulse Width	0.1 – 50 microseconds:
Pulse Width Pulse Rate (PRF)	U.I – 50 microseconas 50 kHz max
Duty Cycle	6% max
RF Rise and Fall	30 ns max. (10% – 90%)
Delay	$\leq 1 \ \mu s$ max. from pulse input to RF 90%
Pulse Width Distortion	
Pulse Off Isolation	nce between TTL Input Gate and RF pulse 60 dB min
Pulse Input	TTL level, 50 ohm nominal termination
Noise Figure	
	8 dB max
Harmonic Distortion	
Harmonic Distortion Spurious	8 dB max Minus 30 dBc max. at rated powe Minus 60 dBc max



Primary Power	100 – 264 VAC
,	50/60 Hz, single phase
	1400 W max.
Connectors	
RF input	Type N female on rear pane
RF output	Type 7–16 DIN female on rear pane
RF output forward a	ind reflected sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear pane
Remote Interfaces	
IEEE-488	24-pir
Ethernet	RJ-45
RS-232	9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	35 kg (76 lb.)
Size (WxHxD)	
~ /	50.3 x 19.8 x 71.4 cm / 19.8 x 7.8 x 28.1 in
Export Classification	3A999

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Frequency Range

Power Range **1 - 18 kW**

9000SP1z2G1z4 1.2 – 1.4 GHz

9000 W Pulse

Rated Power Output	9000 W min.	
Input for Rated Output	1 milliwatt max.	
Flatness	±1 dB typ. / ±2 dB max.	
Frequency Response	1.2 – 1.4 GHz instantaneously	
Gain (Small Signal)	69.6 dB min.	
Gain Adjustment Continuous Range 20 dB min., (4096 steps remote)		

Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance. Alarm and protection above 2.25 kW reflected power (load VSWR > 3:1 9 kW; >6:1 @ 4.5 kW).

Pulse Capability

Dula Miath	0.1 50 mission data
Pulse Width	0.1 – 50 microsecondss
Pulse Rate (PRF)	50 kHz max.
Duty Cycle	6% max.
RF Rise and Fall	30 ns max. (10% to 90%)
Delay	\leq 1 µs max. from pulse input to RF 90%
Pulse Width Distortion	±25 ns max.
(difference	e between TTL Input Gate and RF pulse)
Pulse Off Isolation	60 dB min.
Pulse Input	TTL level, 50 ohm nominal termination
Noise Figure	8 dB max.
Harmonic Distortion	Minus 30 dBc max. at rated power
Spurious	Minus 60 dBc max.



100 - 264 VAC **Primary Power** 50/60 Hz, single phase 1900 W max. Connectors RF input Type N female on rear panel RF output Type 7–16 DIN female on rear panel RF output forward and reflected sample ports Type N female on rear panel Type BNC female on rear panel Pulse input Remote Interfaces IEEE-488 24-pin Ethernet RJ-45 RS-232 9-pin subminiature D Safety Interlock 15-pin Subminiature D Cooling Forced air (self-contained fans) Weight 90 kg (198 lb.) Size (WxHxD) 50.3 x 50.8 x 90 cm / 19.8 x 20 x 35.4 in. 3A999 Export Classification

12000SP1z2G1z4 1.2 - 1.4 GHz 12000 W Pulse

Rated Power Output	12000 W min.
Input for Rated Output	1 milliwatt max.
Flatness	±1 dB typ. / ±2 dB max.
Frequency Response	1.2 – 1.4 GHz instantaneously
Gain (Small Signal))	70.8 dB min.
Gain Adjustment Continuou	ıs Range 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
Pulse Capability Pulse Width Pulse Rate (PRF)	0.1 – 50 microsecondss 50 kHz max
Duty Cycle	≤ 5% @ rated Power
RF Rise and Fall Delay Pulse Width Distortion	@ 8kW max. (max. duty is a user setting) 30 ns max. (10% to 90%) ≤1 µs max. from pulse input to RF 90% n ±25 ns max. nce between TTL Input Gate and RF pulse) 60 dB min. TTL level, 50 ohm nominal termination
Noise Figure	8 dB max
Harmonic Distortion	Minus 30 dBc max. at rated power
Spurious	Minus 60 dBc typ.



Primary Power	100 – 264 VAC
	50/60 Hz, 2600 W max.
Connectors	
RF input	Type N female on rear panel
RF output	Type 7–16 DIN female on rear panel
RF output forward an	d reflected sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
IEEE-488	24-pin
Ethernet	RJ-45
RS-232	9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self–contained fans)
Weight	94 kg (207 lb.)
Size (WxHxD)	
	50.3 x 50.8 x 90 cm / 19.8 x 20 x 35.4 in.
Export Classification	3A999

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Frequency Range **1 – 4 GHz** Power Range **1 - 18 kW**

18000SP1z2G1z4 1.2 - 1.4 GHz 18000 W Pulse

Rated Power Output	18000 W min.
Input for Rated Output	1 milliwatt max.
Flatness	±1 dB typ. / ±2 dB max.
Frequency Response	1.2 – 1.4 GHz instantaneously
Gain (Small Signal))	72.6 dB min.
Gain Adjustment	D 00 ID 1 (100 (1))
Continuous	Range 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
load impedance. Alarr	ge or oscillation when connected to any n and protection above 4.5 kW reflected ad VSWR > 3:1 @ 18 kW; >6:1 @ 9 kW).
Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle ≤ 6% @ RF Rise and Fall Delay Pulse Width Distortion	0.1 - 50 microsecondss 50 kHz max. ≤ 5% @ rated Power 15kW max. (max. duty is a user setting) 30 ns max. (10% to 90%) ≤1 µs max. from pulse input to RF 90% ±25 ns max.
	ce between TTL Input Gate and RF pulse) 60 dB min. TTL level, 50 ohm nominal termination
Noise Figure	8 dB max.
Harmonic Distortion	Minus 30 dBc max. at rated power
Spurious	Minus 60 dBc max.
Primary Power	100 – 264 VAC



50/60 Hz, single phase 3700 W max.

Connectors	
RF input	Type N female on rear panel
RF output	Type 7–16 DIN female on rear panel
RF output forward o	and reflected sample ports
·	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
IEEE-488	24-pin
Ethernet	RJ-45
RS-232	9-pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	105 kg (232 lb.)
Size (WxHxD)	
~ /	50.3 x 50.8 x 90 cm / 19.8 x 20 x 35.4 in.
Export Classification	3A999

1000SP2G4 2 - 4 GHz 1000 W Pulse

Rated Power Output	
	1000 W min.
Input for Rated Output	1 milliwatt max.
Flatness	± 1.5 dB typ. / ± 2.5 dB at rated power
Frequency Response	2 – 4 GHz instantaneously
Gain (Small Signal)	60 dB min.
Gain Adjustment Continuous	Range 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
Pulse Capability	ad VSWR > 3:1 @ 1 kW; >6:1 @ 500 W
Pulse Width	0.1 – 50 microseconds
Pulse Rate (PRF)	50 kHz max.
Duty Cycle	
	6% max
RF Rise and Fall	6% max. 30 ns max (10% – 90%)
	6% max.
RF Rise and Fall Delay Pulse Width Distortion	6% max. 30 ns max (10% – 90%) ≤1 μs from pulse input to RF 90%
RF Rise and Fall Delay Pulse Width Distortion (differenc Pulse Off Isolation	6% max. 30 ns max (10% – 90%) ≤1 μs from pulse input to RF 90% ±25 ns max. te between TTL Input Gate and RF pulse) 60 dB min.
RF Rise and Fall Delay Pulse Width Distortion (difference	6% max. 30 ns max (10% – 90%) ≤1 µs from pulse input to RF 90% ±25 ns max. te between TTL Input Gate and RF pulse)
RF Rise and Fall Delay Pulse Width Distortion (differenc Pulse Off Isolation	6% max. 30 ns max (10% – 90%) ≤1 μs from pulse input to RF 90% ±25 ns max. te between TTL Input Gate and RF pulse) 60 dB min.
RF Rise and Fall Delay Pulse Width Distortion (differenc Pulse Off Isolation Pulse Input	6% max. 30 ns max (10% – 90%) ≤1 µs from pulse input to RF 90% ±25 ns max. ce between TTL Input Gate and RF pulse) 60 dB min. TTL level, 50 ohm nominal termination
RF Rise and Fall Delay Pulse Width Distortion (differenc Pulse Off Isolation Pulse Input Noise Figure	6% max 30 ns max (10% – 90%) ≤1 μs from pulse input to RF 90% ±25 ns max the between TTL Input Gate and RF pulse) 60 dB min. TTL level, 50 ohm nominal termination 15 dB max



Primary Power	100 – 264 VAC 50/60 Hz, single phase 700 W max
Connectors	, oo m max
RF input	Type N female on front pane
RF output	Type N female on front pane
	and reflected sample ports
	Type N female on rear pane
Dulco input	Type BNC female on rear pane
Pulse input	
Remote Interfaces	
IEEE-488	24–pir
Ethernet	R.I–45
RS-232	9-pin subminiature [
Safety Interlock	15–pin Subminiature E
Cooling	Forced air (self-contained fans)
Weight	38 kg (83 lb.
Size (WxHxD)	
(50.3 x 19.8 x 71.4 cm / 19.8 x 7.8 x 28.1 in
Export Classification	3A999.0

(•	Proc	luct Catalog	2023 For Sc	ıles, call: 215.	723.8181 For	an Application	s Engineer, call:	800.933.8181	arworld.us		51
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 1 - 4 GHz

Power Range 1 - 18 kW

2000SP2G4 2 – 4 GHz 2000 W Pulse

2000 W min.
1 milliwatt max. ±1.5 dB typ. / ±2.5 dB at rated power
2 – 4 GHz instantaneously
63 dB min.
s Range 20 dB min., (4096 steps remote)
50 ohms, VSWR 2:1 max.
50 ohms, nominal

Will operate without damage or oscillation when connected to any load impedance. Alarm and protection above 500 W reflected power (load VSWR > 3:1 @ 2 kW; >6:1 @ 1 kW)

Pulse Capability	
Pulse Width	.1 – 50 microseconds
Pulse Rate (PRF)	50 kHz max
Duty Cycle	6% max
RF Rise and Fall	30 us max. (10% – 90%)
Delay	1 µs max. from pulse input to RF 90%
Pulse Width Distortio	on ±25 ns max
(differe	ence between TTL Input Gate and RF pulse)
Pulse Off Isolation	60 dB min
Pulse Input	TTL level, 50 ohm nominal termination
Noise Figure	12 dB typ
Harmonic Distortion	-15 dBc max up to 2.3 GHz @ ≥1300 W
	-20dBc max up to 4 GHz

Spurious



Minus 60 dBc typ.

Primary Power	100 – 264 VAC
	50/60 Hz
	800 W max.
Connectors	
RF input	Type N female on front panel
RF output	Type N female on front panel
RF output forward	and reflected sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear panel
	Remote Interfaces
IEEE-488	24–pir
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature E
Cooling	Forced air (self-contained fans)
Weight	35 kg (76 lb.)
Size (WxHxD)	
	50.3 x 19.8 x 71.4 cm / 19.8 x 7.8 x 28.1 in
,	

5000SP2G4 2 – 4 GHz 5000 W Pulse

Rated Power Output	5000.00					
	5000 W min.					
Input for Rated Output	1 milliwatt max.					
Pulse Droop:	–0.8dB max @5000W for a 50µs pulse					
Flatness	±1.5 dB typical; ±2.5 dB maximum					
Frequency Response	2 – 4 GHz instantaneously					
Gain (Small Signal)	67 dB min					
Gain Adjustment Continuou	us Range 20 dB min., (4096 steps remote)					
Input Impedance	50 ohms, VSWR 2:1 maximum					
Output Impedance	50 ohms, nomina					
Will operate without any load impedance	t damage or oscillation when connected to e without the aid of foldback circuitry. Alarn ove 1.25 kW reflected power (load VSWR = 3:1 @ 5 kW; >6:1 @ 2.5 kW)					
Will operate without any load impedance and protection ab Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall	e without the aid of foldback circuitry. Alarm ove 1.25 kW reflected power (load VSWR s 3:1 @ 5 kW; >6:1 @ 2.5 kW) 0.1–50 microseconds 50 kHz maximum 6% maximum 30 ns max (10% to 90%) 1 µs maximum from pulse input to RF 90%					
Will operate without any load impedance and protection abs Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay Pulse Width Distortion	e without the aid of foldback circuitry. Alarm ove 1.25 kW reflected power (load VSWR s 3:1 @ 5 kW; >6:1 @ 2.5 kW) 0.1–50 microseconds 50 kHz maximum 6% maximum 30 ns max (10% to 90%) 1µs maximum from pulse input to RF 90% 1 ±25 ns maximum (difference between TTL Input Gate and RF pulse)					



Harmonic Distortion	–15dBc up to
	2.3GHz@3200W
	–20dBc up to 4 GHz
Spurious	Minus 60 dBc max.
Primary Power	100–264 VAC
	50/60 Hz
	2000 watts maximum
Connectors	
RF input	Type N female on front panel
RF output	Type 7–16 DIN female on rear panel
RF output forward ar	nd reflected sample ports
D	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
	24 pin
RS-232	9 pin subminiature D
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	98 kg (215 lb.)
Size (WxHxD)	50.3 x 53.3 x 83.8 cm / 19.8 x 21 x 33 in.
Export Classification	3A999.d

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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 1 – 4 GHz

Power Range 1 - 18 kW

7000SP2G4 2 – 4 GHz 7000 W Pulse

7000 W min.
0 dBm max.
–0.8dB max @7000W for a 50µs pulse
±1.5 dB typical; ±2.5 dB maximum
2 – 4 GHz instantaneously
68.5 dB min.
s Range 20 dB min., (4096 steps remote)
50 ohms, VSWR 2:1 maximum
50 ohms, nominal

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance. Alarm and protection above 1.75 kW reflected power (load VSWR > 3:1 @ 7 kW; >6:1 @ 3.5 kW).

Pulse Capability	
Pulse Width	0.1 – 50 microseconds
Pulse Rate (PRF)	50 kHz maximum
Duty Cycle	6% maximum.
RF Rise and Fall	30 ns max (10% – 90%).
Delay	1µs maximum from pulse input to RF 90%
Pulse Width Distortion	±25 ns maximum (difference
	between TTL Input Gate and RF pulse)
Pulse Off Isolation	60 dB minimum
Pulse Input	TTL level, 50 ohm nominal termination
Noise Figure	15 dB typ.



Harmonic Distortion	–15dBc up to
	2.3 GHz@4500 W;
	-20 dBc up to 4 GHz
Spurious	≤ - 60 dBc max.
Primary Power	100 – 264 VAC, 50 – 60 Hz,
	2800 watts maximum
Connectors	
RF Input	Type N female
RF Output	Type 7–16
DIN RF Sample	output forward and reflected sample ports
	Type N female, rear
PULSE INPUT	Type BNC female, rear
Remote Interfaces	
IEEE-488	24 pin
RS-232	9 pin subminiature D
Ethernet	RJ-45
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self–contained fans)
Weight	114 kg / 250 lbs
Size (WxHxD)	50.3 x 53.3 x 83.8 cm / 19.8 x 21 x 33 in
Export Classification	3A999.d

10000SP2G4 2 - 4 GHz 10000 W Pulse

Rated Power Output	10000 W
Input for Rated Output	1 milliwatt max.
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	2 – 4 GHz instantaneously
Gain (Small Signal)	70 dB min.
Gain Adjustment Continuous Rangi	e 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nomina
Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle ≤5% @ rc	1 µs–50 microseconds
RF Rise and Fall	50 kHz max. ted power, ≤6% @ 8kW maximum 30 ns max. (10% – 90%) s max. from pulse input to RF 90% ±25 ns max. (difference between TTL Input Gate and RF
RF Rise and Fall Delay ≤ 1µ: Pulse Width Distortion Pulse Off Isolation	50 kHz max. ted power, ≤6% @ 8kW maximum 30 ns max. (10% – 90%) s max. from pulse input to RF 90% ±25 ns max. (difference between TTL Input Gate and RF pulse) 60 dB min. level, 50 ohm nominal termination 15 dB typ



Spurious	Minus 60 dBc max
Primary Power	
	100 – 264 VAC
	50/60 Hz
	3600 W max
Connectors	
RF input	Type N female on rear pane
RF output	Type 7–16 DIN female on rear pane
RF output forward and refl	ected sample ports
	Type N female on rear pane
Pulse input	Type BNC female on rear pane
Remote Interfaces	
IEEE-488	24-pir
Ethernet	RJ-45
RS-232	9 pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	137 kg (301 lb.)
Size (WxHxD)	
50	.3 x 53.3 x 83.8 cm / 19.8 x 21 x 33 in
Export Classification	3A001

(9)	Proc	luct Catalog	2023 For Sc	ıles, call: 215.	723.8181 For	an Applications	Engineer, call:	800.933.8181	arworld.us		53
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 1 - 4 GHz

Power Range 1 - 18 kW

4000SP2z7G3z1 2.7 - 3.1 GHz 4000 W Pulse

Rated Power Output	4000 W min.
Input for Rated Output	0 dBm max.
Flatness	±1 dB typ. / ±2 dB max.
Frequency Response	2.7 – 3.1 GHz instantaneously
Gain (Small Signal)	66 dB min.
Gain Adjustment Continuous Ran	ge 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
	ge or oscillation when connected
Will operate without damages to any load impedance. All reflected power (load VSW	ge or oscillation when connected arm and protection above 1 kW R > 3:1 @ 4 kW; >6:1 @ 2 kW).
Will operate without damage to any load impedance. All reflected power (load VSW Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay ≤1 Pulse Width Distortion	arm and protection above 1 kW
Will operate without damage to any load impedance. All reflected power (load VSW Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay ≤1 Pulse Width Distortion (difference be Pulse Off Isolation	2rm and protection above 1 kW R > 3:1 @ 4 kW; >6:1 @ 2 kW). 0.1 - 50 microseconds 50 kHz max. 6% max. 30 ns max. (10% - 90%) µs max. from pulse input to RF 90% ±25 ns max. etween TTL Input Gate and RF pulse)
Will operate without damage to any load impedance. All reflected power (load VSW Pulse Capability Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay ≤1 Pulse Width Distortion (difference be difference	2rm and protection above 1 kW R > 3:1 @ 4 kW; >6:1 @ 2 kW). 0.1 – 50 microseconds 50 kHz max. 6% max. 30 ns max. (10% – 90%) µs max. from pulse input to RF 90% ±25 ns max. etween TTL Input Gate and RF pulse) 60 dB min. 8 dB max.



Primary Power	
•	100 – 264 VAC
	50/60 Hz, single phase
	2000 W max.
Connectors	
RF input	Type N female on rear panel
RF output	Type 7–16 DIN female on rear panel
RF output forward	and reflected sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
IEEE-488	24-pin
Ethernet	RJ-45
RS-232	9 pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	43 kg / 95 lbs
Size (WxHxD)	
. ,	50.3 x 19.8 x 71.4 cm / 19.8 x 7.8 x 28.1 in
Export Classification	n 3A999.d
	ii 0007730

8000SP2z7G3z1 2.7 - 3.1 GHz 8000 W Pulse

Spurious	Minus 60 dBc max
Harmonic Distortion	minus 30 dBc max.
Noise Figure	8 dB max.
Pulse Off Isolation	60 dB min.
	veen TTL Input Gate and RF pulse)
Pulse Width Distortion ≤1 µs	±25 ns max.
RF Rise and Fall Delay ≤1 µs	30 ns max. (10% – 90%) max. from pulse input to RF 90%
Duty Cycle	6% max.
Pulse Rate (PRF)	50 kHz max.
Pulse Capability Pulse Width	0.1 – 50 microseconds
to any load impedance. Alarn	or oscillation when connected n and protection above 2 kW > 3:1 @ 8 kW; >6:1 @ 4 kW).
Output Impedance	50 ohms, nominal
Input Impedance	50 ohms, VSWR 2:1 max.
Gain Adjustment Continuous Range	20 dB min., (4096 steps remote)
Gain (small signal)	69 dB min.
Frequency Response	2.7 – 3.1 GHz instantaneously
Flatness	±1 dB typ./±2 dB max.
Input for Rated Output	1 milliwatt max.



Primary Power	100 – 264 VAC
	50/60 Hz,
	3800 W max.
Connectors	
RF input	Type N female on front panel
RF output	Type 7–16 DIN female on rear panel
RF output forward and	reflected sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
IEEE-488	24-pin
Ethernet	RJ-45
RS-232	9 pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	94 kg (207 lb.)
Size (WxHxD)	
· · ·	50.3 x 50.8 x 79.5 cm / 19.8 x 20 x 31.3 in.
Export Classification	3A999.d

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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 1 - 4 GHz

Power Range 1 - 18 kW

12000SP2z7G3z1 2.7 - 3.1 GHz 12000 W Pulse

Rated Power Output	12000 W min.
Input for Rated Output	1 milliwatt max.
Flatness	±1 dB typ./±2 dB max.
Frequency Response	2.7 – 3.1 GHz instantaneously
Gain (small signal)	71 dB min.
Gain Adjustment Continuous Ro	ange 20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, nominal
	nage or oscillation when connected to any and protection above 3 kW reflected powe kW; >6:1 @ 6 kW).
Pulse Width Distortion	0.1 – 50 microseconds 50 kHz max. 6% max. 30 ns max. (10% – 90%) 1 µs max. from pulse input to RF 90% ±25 ns max. between TTL Input Gate and RF pulse) 60 dB min.
Noise Figure	8 dB max.
-	

minus 30 dBc max at rated power.

Minus 60 dBc max.

Harmonic Distortion

Spurious



	50/60 Hz, single phase 6000 W max. Type N female on rear panel
RF input RF output Ty	Type N female on rear panel
RF input RF output Ty	
RF output Ty	
	no 7 14 DIN formale on rear nanel
	pe 7–16 DIN female on rear panel
RF output forward and reflec	
	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
IEEE-488	24–pin
Ethernet	RJ-45
RS-232	9 pin subminiature D
Safety Interlock	15-pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	114 kg (250 lb.)
Size (WxHxD)	
50.3 x 5	53.3 x 83.8 cm / 19.8 x 21 x 33 in
Export Classification	3A999.d

1500/1000SP1z2G3z1 1.2 – 1.4 GHz, 1500 W Pulse 2.7 - 3.1 GHz, 1000 W Pulse

Rated Power Output	1500 W min. 1.2-1.4 GHz 1000W min. 2.7-3.1 GHz
Input for Rated Output	1 milliwatt max.
Flatness	±1 dB typ./±2 dB max.
Frequency Response	1.2 - 1.4 GHz 2.7 – 3.1 GHz
Gain (small signal)	61.8 dB min., 1.2 - 1.4 GHz 60 dB min., 2.7 - 3.1 GHz
Gain Adjustment Continuous Range 2	20 dB min., (4096 steps remote)
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
	V (high band); VSWR > 6:1 @
Pulse Capability	
Pulse Width Pulse Rate (PRF) Duty Cycle RF Rise and Fall Delay ≤1 µs r Pulse Width Distortion	0.1 – 50 microseconds 50 kHz max. 6% max. 30 ns max. (10% – 90%) nax. from pulse input to RF 90% ±25 ns max. een TTL Input Gate and RF pulse) 60 dB min.
Noise Figure	≤8 dB max
Harmonic Distortion	30 dBc max.

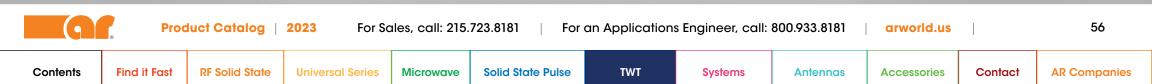


Spurious	Minus 60 dBc max
Primary Power	100 – 264 VAC
•	50/60 Hz
	750 W max.
Connectors	
RF input	Type N female on front panel
RF output	Type N female on front panel
RF output forward and re	flected sample ports
	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Remote Interfaces	
IEEE-488	24-pin
Ethernet	RJ-45
RS-232	9 pin subminiature D
Safety Interlock	15–pin Subminiature D
Cooling	Forced air (self-contained fans)
Weight	40 kg (87 lb.)
Size (WxHxD)	
50.3	x 19.8 x 71.4 cm (19.8 x 7.8 x 28.1 in.)
Export Classification	3A999.d

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CW and Pulse Microwave TWT amplifiers offer up to 20000 W and are compliant with the most stringent specifications and standards.





Frequency Range 2.5 - 50 GHz

Power Range 40 W - 20 kW

300T2G8 2.5 - 7.5 GHz 300 W CW

Power (fundamental), CW @ (Nominal Linear @ 1 dB Compression	350 W / min. 300 W
Flatness ±12 dB max, equa	lized for ±5 dB max. at rated power
Frequency Response	2.5 – 7.5 GHz instantaneously
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	55 dB min.
Gain Adjustment (continuous	range) 35 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

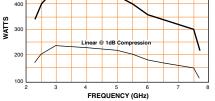
Output power foldback protection at reflected power exceeding 60 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Video Pulse Capability

Pulse Width	0.05 microseconds min.
Pulse Rate (PRF)	100 kHz max.
RF Rise and Fall	30 ns max. (10% – 90%)
Delay	300 ns max. from pulse input to RF 90%
Pulse width distortion	±30 ns max. (50% points of output
	pulse width compared to 50%
	points of input pulse width)



Noise Power Density	
v	75 dBm/Hz max., Minus 80 dBm/Hz typ.
(pulse off)	Minus 140 dBm/Hz typ.
Harmonic Distortion	Minus 3 dBc max., Minus 4.5 dBc typ.
Primary Power	
	190 – 260 VAC
	50/60 Hz, single phase
	3 kVA max.
Connectors	
RF input	Type N female on rear panel
RF output	Type N female on rear panel
RF output sample port	Type N female on rear panel
Interlock	DB-15 female on rear pane
Video	BNC-female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
Forced air (self-co	ontained fans), air entry and exit in rear.
Weight	54 kg (120 lb.)
Size (WxHxD) 50.3	x 29.7 x 68.6 cm / 19.8 x 11.7 x 27 in
	300T2G8
500	cw
	~~
400	++



500T2G8 2.5 - 7.5 GHz 500 W CW

Power (fundamental), Nominal Linear @ 1 dB Comp	CW @ Output Connector 541 W / min. 500 W ression 125 W min.
Flatness ±8 dB ma	x, equalized for ± 5 dB max. at rated power
Frequency Response	2.5 – 7.5 GHz instantaneously
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	57 dB min.
Gain Adjustment (cont	nuous range) 35 dB min.
Input Impedance 50 ohms, VSWR 2:1	
Output Impedance	50 ohms, VSWR 2.5:1 typ.
Miamatah Talaranaa	

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 100 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

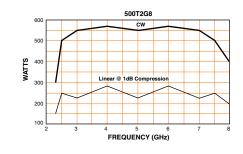
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Noise Power Density

Minus	85 dBm/Hz max., Minus 95 dBm/Hz typ.
Harmonic Distortion	Minus 3 dBc max., Minus 3.5 dBc typ.
Primary Power	See Model Configurations
Connectors RF input RF output RF output sample port Interlock Video GPIB	Type N female on rear panel 7–16 DIN female on rear panel Type N female on rear panel DB–15 female on rear panel BNC-female on rear panel IEEE–488 female on rear panel



Cooling	
Forced air ((self-contained fans), air entry and exit in rear.
Weight	55 kg (120 lb.)
Size (WxHxD)	50.8 x 25.4 x 68.6 cm / 20 x 10 x 27 in.



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Product Catalog 2023 For Sales, call: 215.723.8181 For an Applications Engineer, call: 800.933.8181 arworld.us Contents **Find it Fast RF Solid State** Solid State Pulse TWT **Universal Series** Microwave **Systems Antennas Accessories** Contact **AR Companies**

Frequency Range 2.5 - 50 GHz

Power Range 40 W - 20 kW

1000T2G8B 2.5 - 7.5 GHz 1000 W CW

Power (fur	ndamental), CW, @ Out	put Connector		
Nomina	I 1,100	V / min. 900 W, 2.5 – 2.7 GHz		
	1000 W, 2.7 – 7.5 GHz			
Linear @	I dB Compression	250 W min.		
Flatness	± 8 dB max., equalized for ± 3 dB max. at rated power			
Frequency	Response	2.5 – 7.5 GHz instantaneously		
Input for R	ated Output	1 milliwatt max.		
Gain (at m	iax. setting)	60 dB min.		
Gain Adju	stment (continuous ran	ge) 35 dB min.		
Input Impe	edance	50 ohms, VSWR 2:1 max.		
Output Im	pedance	50 ohms, VSWR 2.5:1 typ.		

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 200 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

Minus 80 dBm/Hz max., Minus 90 dBm/Hz typ.

Harmonic Distortion

Minus 15 dBc max., Minus 17 dBc typ.

Primary Power

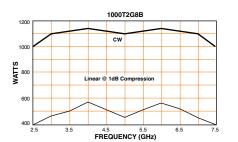
See Model Configurations



onnectors	
RF input	Type N female on rear panel
RF output Type WRD-250 d30	D waveguide flange on rear panel
RF output sample port	Type N female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel

Forced air (self-contained fans), air entry and exit in rear.

Weight	295 kg (650 lb.)
Size (WxHxD)	56 x 160 x 82.3 cm / 22.1 x 63 x 32.4 in.



1500T2G8A 2.5 - 7.5 GHz 1700 W CW

Power (fu	ndamental), CW, @ Output	Connector						
Nominal	2000 W /	min. 1,600 W, 2.5 – 3 GHz,						
		1,700 W, 3 – 7.5 GHz						
Linear @ 1	inear @ 1 dB Compression 400 W m							
Flatness	±8 dB max., equalized for	±6 dB max. at rated power						
Frequency	/ Response							
	2.5	5 – 7.5 GHz instantaneously						
Input for I	Rated Output	1 milliwatt max.						
Gain (at n	nax. setting)	62 dB min.						
Gain Adju	stment (continuous range)	35 dB min.						
Input Imp	edance	50 ohms, VSWR 2:1 max						
Output Im	pedance	50 ohms, VSWR 2.5:1 typ						

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 300 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

Minus 85 dBm/Hz max., Minus 95 dBm/Hz typ.

Harmonic Distortion

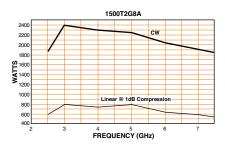
Primary Power

Minus 15 dBc max., Minus 17 dBc typ.

See Model Configurations



Connectors	
RF input	Type N female on rear panel
RF output	Type WRD-250 d30 waveguide flange on rear panel
RF output samp	le ports (forward and reflected)
	Type N female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
Force	ed air (self–contained fans), air entry and exit in rear.
Weight	296 kg (650 lb.)
Size (WxHxD)	56 x 160 x 82.3 cm / 22.1 x 63 x 32.4 in.



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 2.5 - 50 GHz

Power Range 40 W - 20 kW

200T4G8 4 - 8 GHz 200 W CW

Power (fundamente Nominal Linear @ 1 dB Compression	al), CW, @ Output Connector 262 W / min. 200 W 100 W min.
Flatness	±6 dB max. at rated power
Frequency Response	4 – 8 GHz instantaneously
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	53 dB min.
Gain Adjustment (continuous range)	35 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 40 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

Minus 64 dBm/Hz max., Minus 70 dBm/Hz typ.

Harmonic Distortion

Minus 4 dBc max., Minus 7 dBc typ.

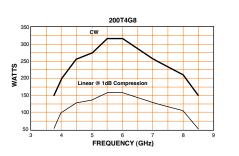
Primary Power

190 – 260 VAC 50/60 Hz, single phase 2 kVA max.



Connectors	
RF input	Type N female on rear panel
RF output	Type N female on rear panel
RF output sample port	Type N female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
Forced air (self-conto	ained fans), air entry and exit in rear.
Weight	54 kg (120 lb.)

50.3 x 29.7 x 68.6 cm / 19.8 x 11.7 x 27 in. Size (WxHxD)



250T6G18 6 - 18 GHz 250 W CW

Connector
300 W / min. 250 W
±6 dB max. at rated power
6 – 18 GHz instantaneously
1 milliwatt max.
54 dB min.
35 dB min.
50 ohms, VSWR 2.5:1 max.
50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 50 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Video Pulse Capability

Pulse Width	1 microseconds min.
Pulse Rate (PRF)	100 kHz max.
RF Rise and Fall	30 ns max. (10% – 90%)
Delay	300 ns max. from pulse input to RF 90%
Pulse width distortion	1
	±30 ns max. (50% points of output
	pulse width compared to 50%
	points of input pulse width)

Noise Power Density

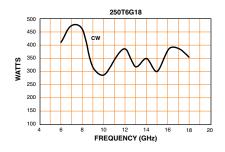
(pulse on) Minus 65 dBm/Hz max., Minus 70 dBm/Hz typ. (pulse off) Minus 140 dBm/Hz typ.

Harmonic Distortion

Minus 5 dBc max., Minus 8 dBc typ.



Primary Power	
, 190	0–260 VAC, 50/60 Hz, single phase, 2 kVA max
Connectors	
RF input	Type N female on rear pane
RF output	Type WRD-650 waveguide flange on rear panel
RF output sample	port Type N female on rear panel
Interlock	DB-15 female on rear panel
Video	BNC-female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
Forced air	(self-contained fans), air entry and exit in rear
Weight	53 kg (115 lb.)
Size (WxHxD)	
. /	50.3 x 29.7 x 68.6 cm / 19.8 x 11.7 x 27 in.



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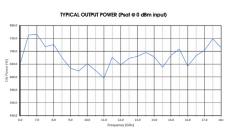
Frequency Range **2.5 – 50 GHz**

Power Range **40 W – 20 kW**

500T6G18 6 - 18 GHz 500 W CW

Rated Power Output	(6 – 18 GHz)	
Minimum		500 W
Typical		600 W
Flatness (maximum @	erated power)	±7 dB max.
Input for Rated Output	ıt	1 milliwatt max.
Gain (small signal)		57 dB min.
Gain Adjustment (co	ntinuous range)	35 dB min.
Input Impedance		50 ohms, VSWR 2.5:1 max.
Output Impedance		50 ohms, VSWR 2.5:1 typ.
Harmonic Distortion		
		Minus 15 dBc max
Connectors		
RF input		N, female, rear
RF output		WRD-650 waveguide, rear
RF output sample		N, female, rear
Interlock		-pin subminiature D, female
GPIB	IEE	E-488 female on rear panel
Cooling	For	ced air (self-contained fans)
Weight		91 kg (201 lb.)
Size (WxHxD)	50.3 x 37.6 x 7	6.2 cm / 19.8 x 14.8 x 32 in.
(No Cabinet)	50.3 x 35.6 x	71.1 cm / 19.8 x 14 x 28in.





250T8G18
7.5 – 18 GHz
250 W CW

Power (fundamental), CW @ 0	utput Connector
Nominal Linear @ 1 dB Compression	300 W / min. 250 W 70 W min.
Flatness ±12 dB max., equali	zed for ±5 dB max. at rated power
Frequency Response	7.5 –18 GHz instantaneously
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	54 dB min.
Gain Adjustment (continuous ro	ange) 35 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 50 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Video Pulse Capability

 Pulse Width
 0.05 microseconds min.

 Pulse Rate (PRF)
 100 kHz max.

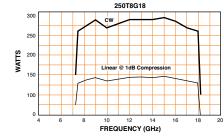
 RF Rise and Fall
 30 ns max. (10% - 90%)

 Delay
 300 ns max. from pulse input to RF 90%

 Pulse width distortion
 ±30 ns max. (50% points of output pulse width compared to 50% points of input pulse width)



Noise Power	Density								
	(pulse on) Minus 70 dBm/Hz max., Minus 72 dBm/Hz typ. (pulse off) Minus 140 dBm/Hz typ.								
Harmonic Dis	stortion								
	Below 10 GHz, Minus 5 dBc max., Minus 7 dBc typ. 10–12 GHz, Minus 8 dBc max., Minus 12 dBc typ. Above 12 GHz, Minus 20 dBc max., Minus 30 dBc typ.								
Primary Pow	er 190 – 260 VAC, 50/60 Hz, single phase, 2.5 kVA max.								
Connectors RF input RF output	Type N female on rear panel								
ki ouipui	Type WRD-750D24 waveguide flange on rear panel								
RF output s	sample port Type N female on rear panel								
Interlock	DB-15 female on rear panel								
Video	BNC-female on rear panel								
GPIB	IEEE-488 female on rear panel								
Cooling									
Ū	Forced air (self-contained fans), air entry and exit in rear.								
Weight	53 kg (115 lb.)								
Size (WxHxD))								
	50.3 x 29.7 x 68.6 cm / 19.8 x 11.7 x 27 in.								
	250T8G18								
300	cw_								
250									



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range **2.5 – 50 GHz**

Power Range 40 W - 20 kW

500T8G18 7.5 - 18 GHz 500 W CW

Power (fundamental), CW, @ Output Connector								
Nominal		543 W / min. 500 W						
Linear @ 1 dB	Compression	125 W min.						
Flatness ±	1 dB max., equalized f	ed for ±3 dB max. at rated power						
Frequency Re	sponse	7.5 – 18 GHz instantaneously						
Input for Rate	d Output	1 milliwatt max.						
Gain (at max.	setting)	57 dB min.						
Gain Adjustm	ent (continuous range)) 35 dB min.						
Input Impeda	nce	50 ohms, VSWR 2:1 max.						
Output Imped	ance	50 ohms, VSWR 2.5:1 typ.						

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 100 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

Minus 70 dBm/Hz max., Minus 72 dBm/Hz typ.

Harmonic Distortion

Minus 20 dBc/Hz max., Minus 22 dBc/Hz typ.

Primary Power

See Model Configurations

Connectors

 RF input
 Type N female on rear panel

 RF output
 Type WRD-750D24 waveguide flange on rear panel

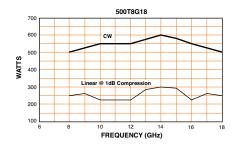
 RF output sample port
 Type N female on rear panel

 GPIB
 IEEE-488 female on rear panel

 Interlock
 DB-15 female on rear panel



Cooling	Forced air (self-contained fans), air entry and exit in rear.
Weight	91 kg (200 lb.)
Size (WxHxD) 50.3 x 40.6 x 68.6 cm / 19.8 x 16 x 27 in.



1000T8G18B 7.5 - 18 GHz 1000 W CW

Power (fundamental), CW, @ Out	put Connector					
Nominal	1,100 W					
Minimum 1000 W 7.5	– 17 GHz, 925 W 17 – 18 GHz					
Linear @ 1 dB Compression 250 W m						
Flatness						
±11 dB max., equalized	d for ± 3 dB max. at rated power					
Frequency Response 7.5 – 18 GHz instantar						
Input for Rated Output	1 milliwatt max.					
Gain (at max. setting)	60 dB min.					
Gain Adjustment (continuous rang	ge) 35 dB min.					
Input Impedance 50 ohms, VSWR 2:1 n						
Output Impedance 50 ohms, VSWR 2.5:1						

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 200 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

Minus 70 dBm/Hz max., Minus 72 dBm/Hz typ.

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Harmonic Distortion
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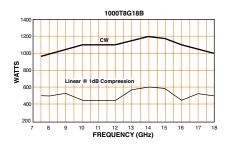
Minus 20 dBc max., Minus 27 dBc typ.

Primary Power

See Model Configurations



Connectors RF input	Type N female on rear panel
RF output Typ RF output sampl Interlock	be WRD–750D24 waveguide flange on rear panel le port Type N female on rear panel DB–15 female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling Forced air	(self-contained fans), air entry and exit in rear.
Weight	295 kg (650 lb.)
Size (WxHxD)	56 x 160 x 82.3 cm / 22.1 x 63 x 32.4 in.



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range **2.5 – 50 GHz**

Power Range 40 W – 20 kW

1500T8G18 7.5 - 18 GHz 1500 W CW

00 W ' min.
ower
ously
max.
min.
min.
max.
1 typ.

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 300 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

Minus 70 dBm/Hz max., Minus 72 dBm/Hz typ.

Harmonic Distortion

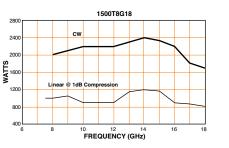
Minus 20 dBc max., Minus 27 dBc typ.

Primary Power

See Model Configurations

Connectors RF input Type N female on rear panel RF output Type WRD–750D24 waveguide flange on rear panel RF output sample ports (forward and reverse) RF output sample ports (forward and reverse) Type N female on rear panel Interlock DB–15 female on rear panel GPIB IEEE–488 female on rear panel Cooling Forced air (self–contained fans), air entry and exit in rear. Weight 546 kg (1,200 lb.)

Size (WxHxD) (2 cabinets) 56 x 160 x 84 cm / 22.1 x 63 x 33 in. per cabinet



40T18G26A 18 - 26.5 GHz 40 W CW



Power (fundamental), CW, @ Output Connector							
Nominal Linear @ 1 dB Compression	45 W / min. 40 W 10 W min.						
Flatness	±8 dB max.						
Frequency Response	18 – 26.5 GHz instantaneously						
Input for Rated Output	1 milliwatt max.						
Gain (at max. setting)	46 dB min.						
Gain Adjustment (continuous rar	ige) 35 dB min.						
Input Impedance	50 ohms, VSWR 2:1 max.						
Output Impedance	50 ohms, VSWR 2.5:1 typ.						

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 10 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Video Pulse Capability (S2V Option)

Pulse Width 0.1 microseconds min. Pulse Rate (PRF) 10 kHz max. Duty Cycle

Some restrictions apply. Contact AR with application requirements.

 RF Rise and Fall
 30 ns max. (10% - 90%)

 Delay
 300 ns max from pulse input to RF90%

 Pulse Width Distortion
 300 ns max from pulse input to RF90%

30 ns max (50% points of output pulse width
compared to 50% points of input pulse width)Noise Power Density (pulse off)Minus 140 dBm/Hz typ.Pulse Off Isolation80 dB min., 90 dB typ.Pulse InputMinus 140 dBm/Hz typ.

TTL Level, 50 Ohm nominal termination, high level enables RF when video pulsing mode is selected.

Minus 60 dBm/Hz max., Minus 65 dBm./Hz typ. -15 dBc max. Harmonic Distortion Primary Power See Model Configurations Connectors RF input Type K female on rear panel RF output Type WR-42 waveguide flange on rear panel RF output sample port Type K female on rear panel DB-15 female on rear panel Interlock GPIB IEEE-488 female on rear panel Pulse Input (S2V Option) BNC female on rear panel

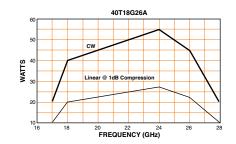
Cooling

Weight

Noise Power Density

Forced air (self-contained fans), air entry and exit in rear.

Size (WxHxD) 50.3 x 16.5 x 68.6 cm / 19.8 x 6.5 x 27 in.



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range **2.5 – 50 GHz**

Power Range 40 W - 20 kW

130T18G26z5B 18 - 26.5 GHz 130 W CW

Power (fundamental), CW, @ Output Connector							
Nominal	150 W / min. 130 W						
Linear @ 1 dB Compression	30 W min.						
Flatness	±9 dB max.						
Frequency Response	18 – 26.5 GHz instantaneously						
Input for Rated Output	1 milliwatt max.						
Gain (at max. setting)	52 dB min.						
Gain Adjustment (continuous ran	ge) 35 dB min.						
Input Impedance	50 ohms, VSWR 2:1 max.						
Output Impedance	50 ohms, VSWR 2.5:1 typ.						

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 20 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

Minus 70 dBm/Hz max., Minus 75 dBm./Hz typ.

Harmonic Distortion

Minus 15 dBc max., Minus 20 dBc typ.

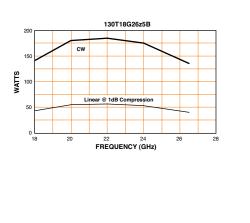
Primary Power

Contents

190 – 260 VAC 50/60 Hz, single phase 0.8 kVA max.



Connectors RF input Type K female on rear panel Type WR-42 waveguide flange on rear panel RF output Type K female on rear panel RF output sample port Interlock DB-15 female on rear panel GPIB IEEE-488 on rear panel Video (S1V Option) BNC female on rear panel Cooling Forced air (self-contained fans), air entry and exit in rear. Weight 36 kg (80 lb.) Size (WxHxD) 50.3 x 16.5 x 68.6 cm / 19.8 x 6.5 x 27 in.



200T18G26z5A 18 - 26.5 GHz 200 W CW

Power (fundamental), CW, @ Output Connector						
Nominal Linear @ 1 dB Compression	225 W / min. 200 W 50 W min.					
Flatness	±10 dB max.					
Frequency Response	18–26.5 GHz instantaneously					
Input for Rated Output	1 milliwatt max.					
Gain (at max. setting)	53 dB min.					
Gain Adjustment (continuous rang	je) 35 dB min.					
Input Impedance	50 ohms, VSWR 2:1 max.					
Output Impedance	50 ohms, VSWR 2.5:1 typ.					

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 40 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Video Pulse Capability

Pulse Width	0.1 microseconds min.
Pulse Rate (PRF)	10 kHz max.
Duty Cycle	

Some restrictions apply. Contact AR with application requirements. RF Rise and Fall 100 ns max. (10% – 90%) Delay 500 ns max from pulse input to RF90%

Pulse Width Distortion

200 ns max (50% points of output pulse width compared to 50% points of input pulse width) Noise Power Density (pulse off) Minus 140 dBm/Hz typ. Pulse Off Isolation 80 dB min., 90 dB typ. Pulse Input

> TTL Level, 50 Ohm nominal termination, high level enables RF when video pulsing mode is selected.



Noise Power Dens	ity Minus 7	0 dBm	ı/Hz n	nax.,	Minus	s 75 d	dBm/ŀ	Iz typ.
Harmonic Distortio		Minus	20 d	Bc ma	ах., N	linus	30 dE	Bc typ.
Primary Power								
·				5	0/60	Hz, s	ingle	0 VAC phase (max.
Connectors								
RF input RF output RF output samp Interlock GPIB Video	Type V le port	VR-42	wave T	éguide ype K B–15 IE	e flan fema fema EE-4	ge or ale or ale or 88 or	n rear n rear n rear n rear n rear	panel panel panel panel panel panel
Cooling Forced o	ir (self–coi	ntainea	d fans	s), air	entry	and	exit ir	n rear.
Weight				-		91	kg (20)0 lb.)
Size (WxHxD)		50.3 x	43 x	81 c	m/1	9.8 x	17 x	32 in.
350		200T18	G26z	5A	_			
300 250	cw	-	_	<				
SE 200						\sim		

Linear @ 1dB Compressio

24

FREQUENCY (GHz)

26

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Frequency Range **2.5 – 50 GHz**

Power Range **40 W – 20 kW**

40T26G40A 26.5 - 40 GHz 40 W CW

Power (fundamental), CW, @ Output Connector							
Nominal	45 W / min. 40 W						
Linear @ 1 dB Compression	10 W min.						
Flatness	±8 dB max.						
Frequency Response	26.5 – 40 GHz instantaneously						
Input for Rated Output	1 milliwatt max.						
Gain (at max. setting)	46 dB min.						
Gain Adjustment (continuous ra	nge) 35 dB min.						
Input Impedance	50 ohms, VSWR 2:1 max.						
Output Impedance	50 ohms, VSWR 2.5:1 typ.						

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 10 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

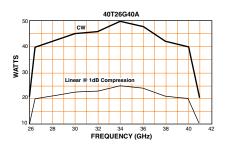
GPIB

Minus 60 dBm/Hz max., Minus 70 dBm/Hz i					
Harmonic Distortic	n	–15 dbc max.			
Primary Power					
		See Model Configurations			
Connectors					
RF input		Type K female on rear panel			
RF output	Type WR-2	8 waveguide flange on rear panel			
RF output samp		Type K female on rear panel			
Interlock		DB-15 female on rear panel			

IEEE-488 on rear panel



Cooling Forced air (self-contained fans), air entry and exit in rear						
Weight	30 kg (65 lb.)					
Size (WxHxD)	50.3 x 16.5 x 68.6 cm / 19.8 x 6.5 x 27 in.					



130T26z5G40B 26.5 – 40 GHz 130 W CW



Connectors

Power (fundamental), CW, @ Output Connector						
Nominal	150 W / min. 130 W					
Linear @ 1 dB Compression	30 W min.					
Flatness	±10 dB max.					
Frequency Response	26.5 – 40 GHz instantaneously					
Input for Rated Output	1 milliwatt max.					
Gain (at max. setting)	52 dB min.					
Gain Adjustment (continuous ra	nge) 35 dB min.					
Input Impedance	50 ohms, VSWR 2:1 max					
Output Impedance	50 ohms, VSWR 2.5:1 typ.					

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 20 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Noise Power Density

Minus 70 dBm/Hz max., Minus 75 dBm./Hz typ.

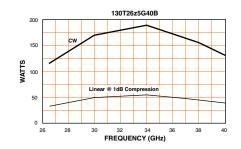
Harmonic Distortion

Minus 15 dBc max., Minus 20 dBc typ.

Primary Power

190 – 260 VAC 50/60 Hz, single phase 0.8 kVA max.

RF input RF output RF output sample po	
Interlock GPIB	DB-15 female on rear panel IEEE-488 on rear panel
Cooling Forced ai	r (self–contained fans), air entry and exit in rear.
Weight	36 kg (80 lb.)
	Size (WxHxD) 50.3 x 16.5 x 68.6 cm / 19.8 x 6.5 x 27 in.



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Frequency Range 2.5 - 50 GHz

Power Range 40 W - 20 kW

200T26z5G40A 26.5 - 40 GHz 200 W CW

Power (fundamental), CW, @ Output Connector							
Nominal Linear @ 1 dB Compression	225 W / min. 200 W 50 W min.						
Flatness	+10 dB max						
Tulless	±10 dB IIIdx.						
Frequency Response	26.5 – 40 GHz instantaneously						
Input for Rated Output	1 milliwatt max.						
Gain (at max. setting)	53 dB min.						
Gain Adjustment (continuous range)	35 dB min.						
Input Impedance	50 ohms, VSWR 2:1 max.						
Output Impedance	50 ohms, VSWR 2.5:1 typ.						

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 40 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

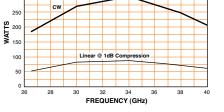
Video Pulse Capability	
Pulse Width	0.1 microseconds min.
Pulse Rate (PRF)	10 kHz max.
Duty Cycle	
Some restriction	ns apply. Contact AR with application
	requirements.
RF Rise and Fall	100 ns max. (10% – 90%)
	O ns max from pulse input to RF90%
Pulse Width Distortion	
200 ns mo	ix (50% points of output pulse width
	to 50% points of input pulse width)
Noise Power Density (pulse off	
Pulse Off Isolation	80 dB min., 90 dB typ.

Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	
TTL Level 50 Ohm r	nominal termination high level

enables RF when video pulsing mode is selected.



Noise Power Densi	1
IV	linus 70 dBm/Hz max., Minus 75 dBm./Hz typ.
Harmonic Distortion	n
	Minus 20 dBc max., Minus 30 dBc typ.
Primary Power	
•	190 – 260 VAC
	50/60 Hz, single phase
	3 kVA max.
Connectors	
RF input	Type K female on rear panel
RF output	Type WR-42 waveguide flange on rear panel
RF output sample	
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 on rear panel
Video	BNC female on rear panel
Cooling	
Forced air (self–contained fans), air entry and exit in rear.
Weight	91 kg (200 lb.)
Size (WxHxD)	50.3 x 43 x 81 cm / 19.8 x 17 x 32 in.
	200T26z5G40A
350	
300	
250 CW	



70T40G50 40 - 50 GHz 70 W CW

Power (fundamental), CW, @ Output Flange	
Minimum	70 W, 40 GHz – 45 GHz
	50 W, 45 GHz – 50 GHz
Flatness	±3 dB max. at rated power
Frequency Response	40 – 50 GHz instantaneously
Input for Rated Output	1 milliwatt max.
Gain (at maximum setting)	47 dB min.
Gain Adjustment (continuous range	e) 35 dB min.
Input Impedance	50 ohms, VSWR 2:1 max
Output Impedance	50 ohms, VSWR 2.5:1 typ

Mismatch Tolerance

Output power foldback protection at reflected power exceeding 20 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Issue ania Distantian	Minus 15 dDa tura
Harmonic Distortion	Minus 15 dBc typ.

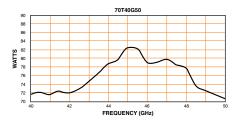
Spurious Response (non-harmonic) Minus 50 dBc typ. (excluding harmonics)

Primary Power

190 - 260 VAC 50/60 Hz, single phase 1 kVA max.



Connectors	
RF input	Type 2.4 mm female on rear panel
RF output	
Type WR	2–22 waveguide flange on rear panel, all tapped
RF output sample	e ports (forward and reflected)
	Type 2.4 mm female on rear panel
Remote Interface	IEEE-488
Interlock	DB-15 female on rear panel
Cooling Forced air	(self-contained fans), air entry and exit in rear.
Weight	42 kg (93 lb.)
Size (WxHxD)	48.26 x 16.5 x 76.2 cm / 19 x 6.5 x 30 in.
Export Classification	n EAR99



9	Proc	luct Catalog	2023 For So	iles, call: 215.	723.8181 Fo	or an Applications	Engineer, call: 8	800.933.8181	arworld.us		65
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range **2.5 – 50 GHz**

Power Range **40 W – 20 kW**

100T40G50 40 - 50 GHz 100 W CW

Power (fundamental), CW, @ Outpu	it Connector
Minimum	100 W
Flatness	±8 dB max.
Frequency Response	40 – 50 GHz instantaneously
Input for Rated Output	1 milliwatt max.
Gain (small signal)	50 dB min.
Gain Adjustment (continuous range)) 35 dB min.
Input Impedance	50 ohms, VSWR 2:1 max.
Output Impedance	50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

Will operate without damage or oscillation when connected to any load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Modulation Capability:

Interlock GPIB

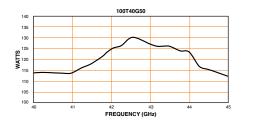
	AM, FM, or pulse modulation appearing eak envelope power limited to specified power.
Harmonic Distortion	
	Minus 22 dBc typ.
Primary Power	
	190 – 260 VAC
	50/60 Hz, single phase 1.5 kVA max.
Connectors	
RF input	Type 2.4 mm female on front panel
RF output Type	WR-22 waveguide flange on rear panel
RF output sample ports	Type 2.4 mm female on rear panel

DB-15 female on rear panel

IEEE-488 female on rear panel



Cooling Forced air (s	elf-contained fans), air entry and exit in rear.
Weight	82 kg (180 lb.)
Size (WxHxD)	50.3 x 43 x 76 cm / 19.8 x 17 x 30 in.



4000TP2G4 2 - 4 GHz 4000 W Pulse

Power (fundamental), Peak Pulse, @	Output
Nominal	5800 W / min. 4.7 kW
Flatness	±10 dB max.
Frequency Response	2 – 4 GHz
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	66 dB min.
Gain Adjustment (continuous range)	35 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max.
Output Impedance	50 ohms, VSWR 2.5:1 typ.
Minnestels Televines	

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 1000 W. Will operate without damage with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

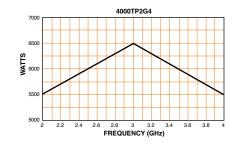
Pulse Capability

	0.07 50 1
Pulse Width	0.07 – 50 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	4% max.
RF Rise and Fall	35 ns max. (10% – 90%)
Delay	300 ns max. from pulse input to RF 90%
Pulse Width Distortion	
±50 n:	s max. (50% points of output pulse width
comp	pared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination

(pulse on) Minus 57 dBm/Hz max., Minus 59 dBm/Hz typ. (pulse off) Minus 140 dBm/Hz typ.



Harmonic Distortion	Minus O dBc max.
Primary Power	See Model Configurations
Connectors	
RF input	Type N female on rear panel
RF output	Type N female on rear panel
RF output forward sample port	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
Forced air (self-contai	ned fans), air entry and exit in rear.
Weight	75 kg (165 lb.)
Size (WxHxD) 51	x 27 x 81 cm / 19.8 x 10.5 x 32 in.



	Proc	luct Catalog	2023 For Sa	iles, call: 215.7	723.8181 For (an Applications	s Engineer, call: 8	800.933.8181	arworld.us		66
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 2.5 - 50 GHz

Power Range 40 W - 20 kW

6900TP2G4 2 – 4 GHz 6900 W Pulse

Rower (fundamental)	Peak Pulse, @ Output
Nominal	9000 W; Minimum, 6900 W
Flatness	±8 dB maximum, ±4 dB at rated power
Frequency Response	2 – 4 GHz
Input for Rated Outpu	t 1 milliwatt max.
Gain (at max. setting)	68 dB min.
Gain Adjustment (cor	tinuous range) 35 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max.
Output Impedance	50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 4000 watts. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

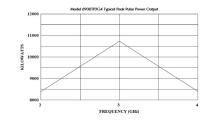
Pulse Capability

Pulse Width	0.2 – 50 microseconds.
Pulse Rate (PRF)	100 kHz maximum
Duty Cycle	4% maximum.
RF Rise and Fall	70 ns max (10% – 90%).
Delay	500 ns maximum from pulse input to RF 90%
Pulse Width Disto	rtion

±50 ns maximum (50% points of output pulse width compared to 50% points of input pulse width) Pulse Off Isolation 80 dB minimum, 90 dB typical Pulse Input TTL level, 50 ohm nominal termination



n) Minus 55 dBm/Hz (maximum); Minus 84 dBm/Hz (typical) off) Minus 140 dBm/Hz (typical) Minus 15 dBc max. See Model Configurations Type N female on e DIN 7-16 female on rear panel rd and reflected):
off) Minus 140 dBm/Hz (typical) Minus 15 dBc max See Model Configurations Type N female on PIN 7-16 female on rear panel
See Model Configurations Type N female on DIN 7-16 female on rear panel
Type N female on DIN 7-16 female on rear panel
DIN 7-16 female on rear panel
1
rd and reflected):
Type N female on rear panel
Type BNC female on rear panel
IEEE-488 female on rear panel
DB-15 female on rear panel
d fans), air entry and exit in rear.
1011 0/5 1
121 kg, 265 lbs



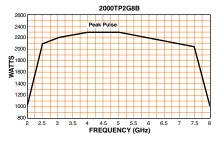
2000TP2G8B 2.5 - 7.5 GHz 2000 W Pulse

,	Peak Pulse, @ Output Connector
Nominal	2,200 W / min. 2000 W
Flatness	
±13 dB max	., equalized for $\pm 4 \text{ dB}$ max. at rated power
Frequency Response	
	2.5 – 7.5 GHz instantaneously
Input for Rated Output	
	1 milliwatt max.
Gain (at max. setting)	
(0)	63 dB min.
Gain Adjustment (conti	inuous ranae)
, (35 dB min.
Input Impedance	
	50 ohms, VSWR 2.5:1 max
Output Impedance	
	50 ohms, VSWR 2.5:1 typ.
Mismatch Tolerance	
exceeding 1000 W. with any magnitude of	oldback protection at peak reflected power Will operate without damage or oscillation and phase of source and load impedance. unshielded open due to coupling to input. Should not be tested with connector off.
Pulse Capability	
Pulse Width	0.07 – 30 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	4% max.
RF Rise and Fall Delay	30 ns max (10% – 90%) 300 ns max. from pulse input to RF 90%
Deluy	

Pulse Width Distortion ±30 ns max (50% points of output pulse width compared to 50% points of input pulse width)



Pulse Off Isolation	80 dB min., 90 dB
typ. Pulse Input termination	TTL level, 50 ohm nominal
Noise Power Density (pulse on) typ.	Minus 70 dBm/Hz max., Minus 72 dBm/Hz
(pulse off) Hz typ.	Minus 140 dBm/
Harmonic Distortion typ.	Minus 0 dBc max., Minus 1.5 dBc
Primary Power	190 – 260 VAC Single phase, 50/60 Hz 1.2 kVA max.
Connectors	
RF input	Type N female on rear panel
RF output RF output sample po	t Type N female on rear panel t Type N female on rear panel
Pulse input	Type BNC female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 2.5 - 50 GHz

Power Range 40 W - 20 kW

8000TP2z7G3z1 2.7 - 3.1 GHz 8000 W Pulse

Power (fundamental), CW, @ Output Nominal Flatness	Connector 10000 W / min. 8000 W ±6 dB max. 2 7 - 3 1 GHz
Frequency Response Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	69 dB min.
Gain Adjustment (continuous range)	35 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max.
Output Impedance	50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

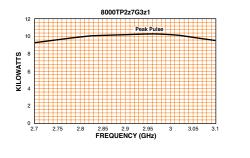
Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Pulse Capability	
Pulse Width	0.1 – 40 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	1% max.
RF Rise and Fall	50 ns max. (10% – 90%)
Delay	500 ns max. from pulse input to RF 90%
Pulse Width Distortio	n
±30	ns max. (50% points of output pulse width
COL	mpared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination
Noise Power Density	

Harmonic Distorti	on Minus 20 dBc max.
(pulse off)	Minus 140 dBm/Hz typ.
(pulse on)	Minus 55 dBm/Hz max., Minus 80 dBm/Hz typ.



Primary Power	190 – 260 VAC
	50/60 Hz, three phase, delta (4 wire)
	2 kVA max.
Connectors	
RF input	Type N female on rear panel
RF output	Type DIN 7–16 female on rear panel
RF output samp	le ports (forward and reflected)
	Type N female on rear panel
Pulse Input	Type BNC female on rear panel
Interlock	DB-15 female on rear pane
GPIB	IEEE-488 female on rear pane
Cooling	
Forced air	(self-contained fans), air entry and exit in rear.
Weight	61 kg (135 lb.)
Size (WxHxD)	50.3 x 26 x 88.9 cm / 19.8 x 10.3 x 35 in.



4000TP4G8 4 – 8 GHz 4000 W Pulse

in. 3.8 kW from 4 – 4.5 GHz, Hz, 3.8 kW from 7.5 – 8 GHz ±10 dB min. 4 – 8 GHz
4 – 8 GHz
1 milliwatt max.
66 dB min.
) 35 dB min.
50 ohms, VSWR 2.5:1 max.
50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 1000 W. Will operate without damage with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

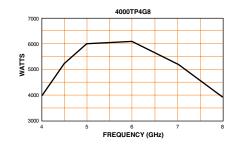
Pulse Capability

Pulse Width	0.07 – 50 microseconds					
Pulse Rate (PRF)	100 kHz max.					
Duty Cycle	4% max.					
RF Rise and Fall	35 ns max. (10% to 90%)					
Delay	300 ns max. from pulse input to RF 90%					
Pulse Width Distortion						
±50 ns max. (50% points of output pulse width						
compared to 50% points of input pulse width)						

Pulse Off Isolation 80 dB min., 90 dB typ. TTL level, 50 ohm nominal termination Pulse Input



(pulse on) (pulse off)							
Harmonic Distortion	Minus O dBc max						
Primary Power	See Model Configurations in Specification 3 kVA max.						
Connectors							
RF input	Type N female on rear panel						
RF output	Type WRD-350 waveguide flange on rear panel						
RF output forward s							
Pulse input	Type BNC female on rear panel						
Interlock	DB–15 female on rear panel						
GPIB	IEEE-488 female on rear panel						
Cooling							
	air (self-contained fans), air entry and exit in rear.						
Weight	71 kg (155 lb.)						



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 2.5 - 50 GHz

Power Range 40 W - 20 kW

7400TP4G8 4 - 8 GHz 7400 W Pulse

Power (fundamental), Peak Pulse, @ Nominal	Output 10000 W / min. 7,400 W
Flatness ±10 d	B min., ±5 dB at rated power
Frequency Response	4 – 8 GHz
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	69 dB min.
Gain Adjustment (continuous range)	35 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max.
Output Impedance	50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 2000 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

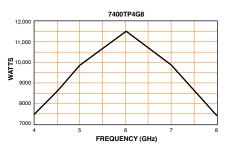
ulse Capability	
Pulse Width	0.2 – 50 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	4% max.
RF Rise and Fall	70 ns max. (10% – 90%)
Delay	500 ns max. from pulse input to RF 90%
Pulse Width Distortic	n
±50	ns max. (50% points of output pulse width
con	npared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination

Noise Power Density

Minus 65 dBm/Hz max., Minus 85 dBm/Hz typ. (pulse on) (pulse off) Minus 140 dBm/Hz typ.



Harmonic Distor	tion Minus 12 dBc max.			
Primary Power	See Model Configurations in Specification 5 kVA max			
Connectors				
RF input	Type N female on rear panel			
RF output	Type WRD-350 waveguide flange on rear panel			
RF output forw	ard and reflected sample ports			
	Type N female on rear panel			
Pulse input	Type BNC female on rear panel			
Interlock	DB-15 female on rear panel			
GPIB	IEEE-488 female on rear pane			
Cooling				
Forced ai	r (self–contained fans), air entry and exit in rear			
Weight	123 kg (270 lb.)			
Size (WxHxD) 50.3 x 53 x 91 cm / 19.8 x 21 x 36 ir				



1000TP8G18 7.5 - 18 GHz 1000 W Pulse

Power (fur Nomina	ndamental), Peak Pulse, (I	Output Connector 1,800 W / min. 1000 W				
Flatness	±8 dB max., equalized	for ±3 dB max. at rated power				
Frequency	Response	7.5 – 18 GHz instantaneously				
Input for R	ated Output	1 milliwatt max.				
Gain (at m	iax. setting)	60 dB min.				
Gain Adju	stment (continuous range) 35 dB min.				
Input Impe	edance	50 ohms, VSWR 2.5:1 max.				
Output Im	pedance	50 ohms, VSWR 2.5:1 typ.				
Miamatah	Televenee					

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 500 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Pulse Canability

ing Daway Danaity	
Pulse Input	TTL level, 50 ohm nominal termination
Pulse Off Isolation	80 dB min. / 90 dB typ.
	ns max. (50% points of output pulse width pared to 50% points of input pulse width)
Pulse Width Distortio	
Delay	300 ns max. from pulse input to RF 90%
RF Rise and Fall	30 ns max. (10% – 90%)
Duty Cycle	4% max.
Pulse Rate (PRF)	100 kHz max.
Pulse Width	0.07 – 100 microseconds

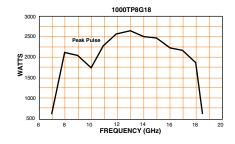
Noise Power Density

(pulse on) Minus 57 dBm/Hz max., Minus 58 dBm/Hz typ. (pulse off) Minus 140 dBm/Hz typ.



Harmonic Distortion	Minus 2 dBc max., Minus 3 dBc typ.
Primary Power	190 – 260 VAC 50/60 Hz, single phase 1.5 kVA max.
Connectors RF input RF output Type RF output forward Pulse input Interlock GPIB	Type N female on rear panel wRD-750D24 waveguide flange on rear panel sample port Type N female on rear panel Type BNC female on rear panel DB-15 female on rear panel IEEE-488 female on rear panel
Cooling Forced air	(self-contained fans), air entry and exit in rear.
Weight	52 kg (115 lb.)
Size (WxHxD)	50.3 x 25.4 x 69 cm / 19.8 x 10 x 27 in.
Export Classification	n 3A999.d





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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range 2.5 - 50 GHz

Power Range 40 W - 20 kW

2000TP8G18 7.5 - 18 GHz 2000 W Pulse

Power (fur Nomina	,	Pulse, @ Output Connector 2,500 W / min. 2000 W			
Flatness	±8 dB max., equ	alized for ±3 dB max. at rated power			
Frequency	Response	7.5 – 18 GHz instantaneously			
Input for Rated Output 1 millive					
Gain (at m	ax. setting)	63 dB min.			
Gain Adjus	stment (continuous	range) 35 dB min.			
Input Impe	edance	50 ohms, VSWR 2.5:1 max.			
Output Imp	oedance	50 ohms, VSWR 2.5:1 typ.			

Mismatch Tolerance

Output pulse width foldback protection at average reflected power exceeding 1000 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Pulse Capability

Pulse Width	0.07 – 30 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	4% max.
RF Rise and Fall	30 ns max (10% – 90%)
Delay	300 ns max. from pulse input to RF 90%
Pulse Width Distortion	

±30 ns max (50% points of output pulse width

comp	ared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min. / 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination



Noise Power Density Minus 55 dBm/Hz max., Minus 58 dBm/Hz (pulse on)

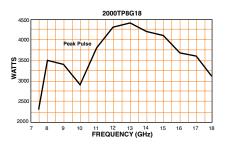
(pulse off) typ.	Minus 140 dBm/Hz
Harmonic Distortion	Minus 18 dBc max., Minus 20 dBc typ.
Primary Power	190 – 260 VAC 50/60 Hz, single phase 3 kVA max.

Connectors

typ. (pul typ.

> RF input Type N female on rear panel RF output Type WRD-750D24 waveguide flange on rear panel RF output forward sample port Type N female on rear panel Type BNC female on rear panel Pulse input Interlock DB-15 female on rear panel GPIB IEEE-488 female on rear panel

Coolina



4000TP8G12 8 - 12 GHz 4000 W Pulse

Power (fundamental), Peak Pulse, @	Output
Nominal	5,500 W / min. 4,200 W
Flatness	±10 dB max.
Frequency Response	8 – 12 GHz
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	66 dB min.
Gain Adjustment (continuous range)	35 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max
Output Impedance	50 ohms, VSWR 2.5:1 typ.
Mercan I. I. T. I	

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 1000 W. Will operate without damage with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Pulse Capability

uise oupublility	
Pulse Width	0.07 – 50 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	4% max.
RF Rise and Fall	35 ns max. (10% – 90%)
Delay	300 ns max. from pulse input to RF 90%
Pulse Width Distorti	on
±30	ns max. (50% points of output pulse width
00	npared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination

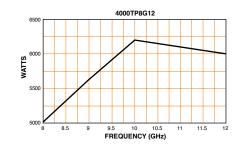
Noise Power Density

(pulse on) Minus 57 dBm/Hz max., Minus 59 dBm/Hz typ. Minus 140 dBm/Hz tvp. (pulse off)



Harmonic Distortion	Minus 10 dBc max.
Primary Power	See Model Configurations in Specification 3 kVA max.
Connectors	
RF input	Type N female on rear panel
RF output	Type WRD-90 waveguide flange on rear panel
RF output forward sam	ple port Type N female on rear panel
Pulse input	Type BNC female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
Forced air ((self-contained fans), air entry and exit in rear.
Weight	75 kg (165 lb.)

51 x 27 x 69 cm / 19.8 x 10.5 x 27 in. Size (WxHxD)



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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Frequency Range **2.5 – 50 GHz**

Power Range **40 W – 20 kW**

8300TP8G12 8 - 12 GHz 8300 W Pulse

@ Output
10000 W / min. 8,300 W
dB max., ±5 dB at rated power
8 – 12 GHz
1 milliwatt max.
69 dB min.
e) 35 dB min.
50 ohms, VSWR 2.5:1 max.
50 ohms, VSWR 2.5:1 typ.

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 4000 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Pulse Capability

Pulse Width	0.2 – 50 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	4% max.
RF Rise and Fall	70 ns max. (10% – 90%)
Delay	500 ns max. from pulse input to RF 90%
Pulse Width Distortion	
±50 ns	s max. (50% points of output pulse width
comp	pared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination

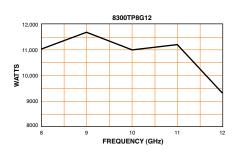
Noise Power Density

(pulse on) Minus 70 dBm/Hz max., Minus 73 dBm/Hz typ. (pulse off) Minus 140 dBm/Hz typ.



Harmonic Distortio	Minus 15 dBc max.
Primary Power	See Model Configurations in Spefication 5 kVA max
Connectors	
RF input	Type N precision female on rear panel
RF output	Type WR-90 waveguide flange on rear panel
RF output forwa	rd and reflected sample ports
	Type N precision female on rear panel
Pulse input	Type BNC female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
v	(self-contained fans), air entry and exit in rear.
Weight	121 kg (265 lb.)

Size (WxHxD) 50.3 x 43 x 84 cm / 19.8 x 17 x 33 in.



20000TP8G12 8 - 12 GHz 20000 W Pulse

Power (fundamental), Peak Pulse,	@ Output
Nominal	22000 W / min. 20000 W
Flatness ±10 (dB max., ±6 dB at rated power
Frequency Response	8 – 12 GHz
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	73 dB min.
Gain Adjustment (continuous range	e) 35 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max
Output Impedance	50 ohms, VSWR 2.5:1 typ
Miamatah Talaranaa	

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 5000 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Pulse Capability

aloo oupubliliy	
Pulse Width	0.1 – 40 microseconds
Pulse Rate (PRF)	20 kHz max.
Duty Cycle	4% max.
RF Rise and Fall	150 ns max. (10% – 90%)
Delay	500 ns max. from pulse input to RF 90%
Pulse Width Distortion	1
±50 n	is max. (50% points of output pulse width
com	pared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination

(pulse on) Minus 65 dBm/Hz max., Minus 85 dBm/Hz typ. (pulse off) Minus 140 dBm/Hz typ.



Harmonic Distortion	Minus 19 dBc max.					
Primary Power	208 VAC ±10% Three phase, delta (4–wire), 50/60 Hz 12 kVA max.					
Connectors						
RF input	Type N female on rear panel					
RF output	Type WRD-90 female on rear panel					
RF output forward sample	ports					
(forward and reflected)	Type N female on rear panel					
Pulse input	Type BNC female on rear panel					
Interlock	DB-15 female on rear panel					
GPIB	IEEE-488 female on rear panel					
Cooling						

Cooling

Weight

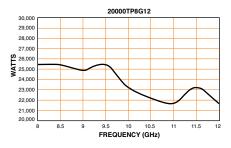
Forced air (self-contained fans), air entry and exit in rear.

575 kg (1,250 lb.) fxD) 57.5 x 196 x 82.5 cm / 22.6 x 77.2 x 32.5 in.

Size (WxHxD) 57.5 x 196 x 82.5 cm / 22.6 x 77.2 x 3

Export Classification

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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

TWT Amplifiers

Frequency Range **2.5 – 50 GHz**

Power Range **40 W – 20 kW**

3000TP12G18 12 - 18 GHz 3000 W Pulse

Power (fundamental), Peak Pulse, @ Output Nominal 3.800 W / min. 3000 V		
	.,,	
Flatness	±10 dB max.	
Frequency Response	12 – 18 GHz	
Input for Rated Output	1 milliwatt max	
Gain (at max. setting)	65 dB min	
Gain Adjustment (continuous range)	35 dB min	
Input Impedance	50 ohms, VSWR 2.5:1 max	
Output Impedance	50 ohms, VSWR 2.5:1 typ	

Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 1000 W. Will operate without damage with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

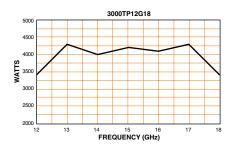
Pulse Capability	
Pulse Width	0.07 – 50 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	4% max.
RF Rise and Fall	30 ns max. (10% – 90%)
Delay	300 ns max. from pulse input to RF 90%
Pulse Width Distortion	1
±30 r	ns max. (50% points of output pulse width
com	pared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination

Noise Power Density

(pulse on) Minus 55 dBm/Hz max., Minus 65 dBm/Hz typ. (pulse off) Minus 140 dBm/Hz typ.



Harmonic Distorti	on Minus 8 dBc max.
Primary Power	See Model Configurations in Specification 2 kVA max.
Connectors	
RF input	Type N female on rear panel
RF output	Type WR-62 waveguide flange on rear panel
RF output forwa	rd sample port
·	Type N female on rear panel
Pulse input	Type BNC female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
Forced air	(self-contained fans), air entry and exit in rear.
Weight	52 kg (115 lb.)
Size (WxHxD)	50.3 x 26 x 81 cm / 19.8 x 10 x 31.9 in.



5700TP12G18 12 - 18 GHz 5700 W Pulse

Power (fundamental), Peak Pulse	e, @ Output
Nominal	7000 W / min. 5700 W
Flatness ±10) dB min., ±5 dB at rated power
Frequency Response	12 – 18 GHz
Input for Rated Output	1 milliwatt max.
Gain (at max. setting)	67 dB min.
Gain Adjustment (continuous ran	ge) 35 dB min.
Input Impedance	50 ohms, VSWR 2.5:1 max
Output Impedance	50 ohms, VSWR 2.5:1 typ
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Mismatch Tolerance

Output pulse width foldback protection at peak reflected power exceeding 3000 W. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

Pulse Capability

Pulse Width	0.2 – 50 microseconds
Pulse Rate (PRF)	100 kHz max.
Duty Cycle	4% max.
RF Rise and Fall	70 ns max. (10% – 90%)
Delay	500 ns max. from pulse input to RF 90%
Pulse Width Distortion	1
±50 n	s max. (50% points of output pulse width
com	pared to 50% points of input pulse width)
Pulse Off Isolation	80 dB min., 90 dB typ.
Pulse Input	TTL level, 50 ohm nominal termination

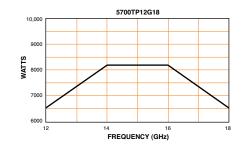
Noise Power Density

(pulse on) Minus 55 dBm/Hz max., Minus 80 dBm/Hz typ. (pulse off) Minus 140 dBm/Hz typ.



Harmonic Distortion	Minus 15 dBc max.
Primary Power	See Model Configurations in Specification 5 kVA max.
Connectors	
RF input	Type N precision female on rear panel
RF output	Type WR-62 waveguide flange on rear panel
RF output forward	and reflected sample ports
	Type N precision female on rear panel
Pulse input	Type BNC female on rear panel
Interlock	DB-15 female on rear panel
GPIB	IEEE-488 female on rear panel
Cooling	
Forced	air (self-contained fans), air entry and exit in rear.
Weight	121 kg (265 lb.)

Weight	121 kg (265 lb.)	
Size (WxHxD)	50.3 x 43 x 84 cm / 19.8 x 17 x 33 in.	



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Test systems by AR can deliver a solution that integrates all your testing needs for radiated and conducted immunity, radiated and conducted emissions, and more. With a highly experienced team, we have the expertise to supply fully automated systems needed to test various EMC standards.



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Find it Fast RF Solid State

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Solid State Pulse Microwave

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TWT

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AR Companies

IEC 61000-4-3 Predefined Systems

SSIEC3V3M

3 V/m field strength with up to a 3 meter test distance from 80 MHz - 6 GHz

System Frequency Range 80 M		80 MHz – 6 GHz
CW Field Strength	5.4 V/m (3 V/m w/ 80%)	AM per IEC 61000-4-3)
Test Distance		Up to 3 meters
UFA	1.5 x 1.5 mete	ers per IEC 61000-4-3

Amplifier Configuration

Models: 50W1000D, 50 W, 50 - 1000 MHz; 15S1G6, 15 W, 700 MHz - 6 GHz

Antenna Configuration

Models: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; ATT700M12G, Log-Periodic, 700 MHz - 12 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

Export Classification

SSIEC10V2M

10 V/m field strength with up to a 2 meter test distance from 80 MHz - 6 GHz

System Frequency Range	80 MHz – 6 GHz
CW Field Strength	18 V/m (10 V/m w/ 80% AM per IEC 61000-4-3)
Test Distance	Up to 2 meters
UFA	1.5 x 1.5 meters per IEC 61000-4-3
Amplifier Configuration	

Models: 125W1000A, 50 W, 80 - 1000 MHz; 30S1G6C, 30 W, 1 - 6 GHz

Antenna Configuration

Models: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; ATT700M12G, Log-Periodic, 700 MHz - 12 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.

Design approach

Export Classification

FAR99

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training One week of installation, SAT and Training will be provided by AR Systems Engineers.

EAR99

SSIEC10V3M

10 V/m field strength with up to a 3 meter test distance from 80 MHz - 6 GHz

System Frequency R	ange	80 MHz – 6 GHz
CW Field Strength 1	8 V/m (10 V/m w	/ 80% AM per IEC 61000-4-3
Test Distance		Up to 3 meters
UFA	1.5 x 1.	5 meters per IEC 61000-4-3

Amplifier Configuration

Models: 150W1000B, 150 W, 80 - 1000 MHz; 75S1G6C, 75 W, 1 - 6 GHz

Antenna Configuration

Models: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; ATT700M12G, Log-Periodic, 700 MHz - 12 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.

Design approach

Export Classification

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit.All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

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SSIEC30V2M 30 V/m field strength with up to a 2 meter test distance from 80 MHz - 6 GHz

System Frequency Range	80 MHz – 6 GHz
CW Field Strength	54 V/m (30 V/m w/ 80% AM per IEC 61000-4-3)
Test Distance	Up to 2 meters
UFA	1.5 x 1.5 meters per IEC 61000-4-3
Amplifier Configuration	

Models: 500W1000C, 500 W, 80 - 1000 MHz; 250S1G6C, 125 W, 1 - 6 GHz

Antenna Configuration

Models: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz ATT700M12G, Log-Periodic, 700 MHz - 12 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

3A001

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Export Classification
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IEC 61000-4-3 Predefined Systems / ISO 11451-2 Predefined Systems

SSIEC30V3M

30 V/m field strength with up to a 3 meter test distance from 80 MHz - 6 GHz

System Frequency Range	80 MHz – 6 GHz
CW Field Strength	54 V/m (30 V/m w/ 80% AM per IEC 61000-4-3)
Test Distance	Up to 3 meters
UFA	1.5 x 1.5 meters per IEC 61000-4-3

Amplifier Configuration

Models: 750W1000B, 750 W, 80 - 1000 MHz; 500S1G6C, 500 W, 1 - 6 GHz

Antenna Configuration

Models: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; ATT700M12G, Log-Periodic, 700 MHz - 12 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by **AR Systems Engineers**

Export Classification

SSISOV50V10K18G

50 V/m field strength for full vehicle testing from 10 kHz – 18 GHz

CW Field Strength
50 V/m (50 V/m w/ 80% AM peak conservation per ISO 11451-1)
Test Distance 2 meters
Field Probe Configuration 1 FL8200 and 4 FL8018 Field Probes
UFA 0.5 meters on each side of reference point per ISO 11451-2
Amplifier Configuration
Models: 2500A225B, 2500 W, 10 kHz - 225 MHz; 500W1000C, 500 W, 80 - 1000 MHz; 75S1G6C, 75 W, 1 - 6 GHz; 75S6G18C, 75 W, 6 - 18 GHz
Antenna Configuration Models: FSA S35012-41 Stripline, 10 kHz - 30 MHz; FSA S12014-5, Log-Periodic, 20 - 220 MHz; ATH200M2G, Horn, 200 - 2000 MHz; ATH800M6G, Horn, 800 - 6000 MHz; ATH6G18A, Horn, 6 - 18 GHz
RF Cable Configuration Four sets (one for each amp/antenna) consisting of 2 and 12 meter lengths and designated bulkhead feedthroughs for each set.
Software Configuration System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.
Design approach Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.
Installation, Site Acceptance Testing (SAT) and Training One week of installation, SAT and Training will be provided by AR Systems Engineers.
Export Classification 3A001

SSISOV50V20M18G

50 V/m field strength for full vehicle testing from 20 MHz - 18 GHz

yster	m Frequency Range	20MHz – 18 GHz
W Fi	eld Strength	
50	V/m (50 V/m w/ 80% AM p	peak conservation per ISO 11451-1)
est D	istance	2 meters
eld	Probe Configuration	4 FL8018 Field Probes
JFA	0.5 meters on each side of	of reference point per ISO 11451–2
mpli	fier Configuration	
	Models: 2500# 5	v25A, 2500 W, 10 kHz - 225 MHz; 00W1000C, 500 , 80 - 1000 MHz; 75S166C, 75 W, 1 - 6 GHz; 75S6G18C, 75 W, 6 - 18 GHz
nten	na Configuration	
	Models: FSA S121 AT AT	014-5, Log-Periodic, 20 - 220 MHz; H200M2G, Horn, 200 - 2000 MHz; H800M6G, Horn, 800 - 6000 MHz; ATH6G18A, Horn, 6 - 18 GHz

RF Cable Configuration

Four sets (one for each amp/antenna) consisting of 2 and 12 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

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Antennas

Export Classification

SSISOV100V10K18G

100 V/m field strength for full vehicle testing from 10 kHz - 18 GHz

System Frequency Range	10kHz – 18 GHz
CW Field Strength	
100 V/m (100 V/m v	w/80% AM peak conservation per ISO 11451-1)
Test Distance 2 met	
Field Probe Configuration 1 FL8200 and 4 FL8018 Field	
JFA 0.5 meters on each side of reference point per ISO 11451-	
Amplifier Configuration	

Models: 5000A225C, 5000 W, 10 kHz - 225 MHz; 1000W1000C, 1000 W, 80 - 1000 MHz; 250S1G6C, 250 W, 1 - 6 GHz; 250T6G18, 250 W, 6 - 18 GHz

Antenna Configuration

Models: FSA S35012-41, Stripeline, 10 kHz - 30 MHz FSA S12014-5, Log-Periodic, 20 - 220 MHz; ATH200M2G, Horn, 200 - 2000 MHz; ATH800M6G, Horn, 800 - 6000 MHz; ATH6G18A, Horn, 6 - 18 GHz

RF Cable Configuration

Four sets (one for each amp/antenna) consisting of 2 and 12 meter Iengths and designated bulkhead feedthroughs for each set

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract

Design approach

Export Classification

Accessories

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices

Inst	allation, Site Acceptance Testing (SAT) and Training
	One week of installation, SAT and Training will be provided by AR Systems Engineers

Contact

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Universal Series

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AR Companies

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Solid State Pulse Microwave

TWT

ISO 11451-2 Predefined Systems / ISO 11452-2 Predefined Systems

SSISOV100V20M18G

100 V/m field strength for full vehicle testing from 80 MHz-18 GHz

Syste	em Frequency Range	20 MHz – 18 GHz
CW F	ield Strength	
100) V/m (100 V/m w/ 80% AM peak	conservation per ISO 11451-1)
Test I	Distance	2 meters
Field	Probe Configuration	4 FL8018 Field Probes
UFA	0.5 meters on each side of re	eference point per ISO 11451- 2
Ampl	ifier Configuration	
	1000W10	C, 5000 W, 10 kHz - 225 MHz; 00C, 1000 W, 80 - 1000 MHz; 250S1G6C, 250 W, 1 - 6 GHz; 250S6G18, 250 W, 6 - 18 GHz
Anter	nna Configuration	
	ATH20	5, Log-Periodic, 20 - 220 MHz; 0M2G, Horn, 200 - 2000 MHz; 0M6G, Horn, 800 - 6000 MHz;

RF Cable Configuration

Four sets (one for each amp/antenna) consisting of 2 and 12 meter lengths and designated bulkhead feedthroughs for each set.

ATH6G18A, Horn, 6 - 18 GHz

Software Configuration

System and testing will be controlled using emcware [®] software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

SSISOV200V10K18G

200 V/m field strength for full vehicle testing from 10 kHz - 18 GHz

System Frequency Range	10 kHz – 18 GHz
CW Field Strength	
200 V/m (200 V/m w/ 80% AM peak conservatio	n per ISO 11451-1)
Test Distance	2 meters
Field Probe Configuration 1 FL8200 and 4 FL	8018 Field Probes
UFA 0.5 meters on each side of reference poin	t per ISO 11451–2
Antenna Configuration	250 W, 6 - 18 GHz,
	dic, 20 - 100 MHz
RF Cable Configuration Five sets (one for each amp/antenna) co meter lengths and designated bulkhead feedth	nsisting of 2 and 8 roughs for each set
Software Configuration System and testing will be controlled using er which is preloaded and delivered on a new P system. Price includes a 1-yea	C as part of overal

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment inputs and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training One week of installation, SAT and Training will be provided by **AR Systems Engineers** Export Classification 3A001

SSISOV200V30M18G

200 V/m field strength for full vehicle testing from 30 MHz - 18 GHz

Syste	m Frequency Range	30 MHz – 18 GHz
	ield Strength V/m (200 V/m w/ 80% AM peak	conservation per ISO 11451-1)
'est [Distance	2 meters
ield	Probe Configuration	4 FL8018 Field Probes
JFA	0.5 meters on each side of refe	erence point per ISO 11451-2
mpli	3000W10	10000 W, 10 kHz - 225 MHz; 00B, 3000 W, 80 - 1000 MHz; 500\$1G6C, 500 W, 1 - 6 GHz; 50\$6G18, 250 W, 6 - 18 GHz;
nten		I, Log-Periodic, 20 - 100 MHz; Log-Periodic, 80 - 1000 MHz;

RF Cable Configuration

Five sets (one for each amp/antenna) consisting of 2 and 8 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware ® software which is preloaded and delivered on a new PC as part of overall system. Price includes a 1-year support contract.

Design approach

Export Classification

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training One week of installation, SAT and Training will be provided by AR Systems Engineers.

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ATH800M&G, Horn, 800 - 6000 MHz;

ATH6G18A, Horn, 6 - 18 GHz

SSISOC50V10K18G

50 V/m field strength for vehicle component testing from 10 kHz - 18 GHz

System Frequency Rang	10 kHz – 18 GHz
CW Field Strength 50 V/m (50 V/m	1% AM peak conservation per ISO 11452-1)
Test Distance	1 meter
Amplifier Configuration	
	els: 100A400A, 100 W, 10 kHz - 400 MHz; 250W1000C, 250 W, 80 - 1000 MHz; 75S1G6C, 75 W, 1 - 6 GHz;

75S6G18C, 75 W, 6 - 18 GHz

Antenna Configuration

> Models: Schwarzbeck TEMZ 5232 or equivalent Stripline, DC - 1000 MHz; ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; AH-Systems AH-118 or equivalent, Horn, 1 - 18 GHz

RF Cable Configuration

Four sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set

Software Configuration

System and testing will be controlled using emcware [®] software which is preloaded and delivered on a new laptop as part of overall system Price includes a 1 year support contract

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit.All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training One week of installation, SAT and Training will be provided by **AR Systems Engineers**

Export Classification

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ISO 11452-2 Predefined Systems

SSISOC50V80M18G

50 V/m field strength for vehicle component testing from 80 MHz – 18 GHz

System Frequency Range	80 MHz – 18 GHz
CW Field Strength	50 V/m (50 V/m w/ 80% AM peak conservation per ISO 11452-1)
Test Distance	1 meter

Amplifier Configuration

Models: 250W1000C, 250 W, 80 - 1000 MHz; 75S1G6C. 75 W. 1 - 6 GHz: 75S6G18C, 75 W, 6 - 18 GHz

Antenna Configuration

Models: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; AH-Systems AH-118 or equivalent, Horn, 1 - 18 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

Export Classification

SSISOC100V10K18G

100 V/m field strength for vehicle component testing from 10 kHz - 18 GHz

System Frequency Range	10 kHz – 18 GHz
CW Field Strength	
100 V/m (100 V/m w/ 80% AM peak cons	ervation per ISO 11452-1)
Test Distance 1 m	
Amplifier Configuration	
2500A225A, 250 500W1000C 75	00 W, 10 kHz - 400 MHz 00 W, 10 kHz - 225 MHz , 500 W, 80 - 1000 MHz S1G6C, 75 W, 1 - 6 GHz 6G18C 40 W, 6 - 18 GHz
Antenna Configuration	
S ATR80M6G, Log-F ATH8	EMZ 5232 or equivalent Stripline, DC - 1000 MHz 'eriodic, 80 MHz - 6 GHz 00M6G, Horn, 1 - 6 GHz 6G18A, Horn, 6 - 18 GHz
RF Cable Configuration Two sets (one for each amp/antenr meter lengths and designated bulkhead	

which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

3A001

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training One week of installation, SAT and Training will be provided by AR Systems Engineers. Export Classification 3A001

SSISOC100V80M18G

100 V/m field strength for vehicle component testing from 80 MHz - 18 GHz

System Frequency Range	80 MHz – 18 GHz
CW Field Strength	
100 V/m (100 v/m w/ 80% AM peak c	onservation per ISO 11452-1)
Test Distance	1 meter
Amplifier Configuration	
Models: 2500A25B,	2500 W, 10 kHz - 225 MHz;
500\//100	0 - EOO W 00 1000 MU-
JUUWIUL)0c, 500 W, 80 - 1000 MHz;
5001/100	75S1G6C, 75 W, 1 - 6 GHz,
	75S1G6C, 75 W, 1 - 6 GHz
4 Antenna Configuration	75S1G6C, 75 W, 1 - 6 GHz
4 Antenna Configuration Models: ATR80M6G, Lo	75S1G6C, 75 W, 1 - 6 GHz 0S6G18C 40 W, 6 - 18 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

3A001

Export Classification

SSISOC200V10K18G

200 V/m field strength for vehicle component testing from 10 kHz - 18 GHz

System Frequency Range	10 kHz – 18 GHz
CW Field Strength 200 V/m (200 V/m w/ 80% AM peak of	conservation per ISO 11452-1)
Test Distance	1 meter
Amplifier Configuration	

Models: 40U1000, 40 W, 10 kHz - 1000 MHz; 2000W1000E, 2000 W, 80 - 1000 MHz; 250S1G6C, 250 W, 1 - 6 GHz; 75S6G18C 75 W, 6 - 18 GHz

Antenna Configuration

Models: Schwarzbeck TEMZ 5232 or equivalent Stripline, DC - 1000 MHz: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; ATH800M6G, Horn, 1 - 6 GHz; ATH6G18A, Horn, 6 - 18 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lèngths and designated bulkhéad feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers

Export Classification

3A001

77 Product Catalog 2023 For Sales, call: 215.723.8181 For an Applications Engineer, call: 800.933.8181 arworld.us Contents **Find it Fast RF Solid State** Solid State Pulse TWT **Universal Series** Microwave **Systems** Antennas Accessories Contact **AR Companies**

ISO 11452-2 Predefined Systems / MIL-STD-461 Predefined Systems

SSISOC200V80M18G

200 V/m field strength for vehicle component testing from 80 MHz – 18 GHz

System Frequency Range	80 MHz – 18 GHz
CW Field Strength 200 V/m (200 V/m w/ 80% AM peak co	onservation per ISO 11452-1)
Test Distance	1 meter
Amplifier Configuration	
Models: 2000W1000	DC, 2000 W, 80 - 1000 MHz;
25	50S1G6C, 250 W, 1 - 6 GHz;
7	5S6G18C, 75 W, 6 - 18 GHz

Antenna Configuration

Models: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; ATH800M6G, Horn, 1 - 6 GHz; ATH6G18A, Horn, 6 - 18 GHz

RF Cable Configuration

Four sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineer.

Export Classification

SSMIL10V10K18G

10 V/m field strength for military testing applications from 10 kHz - 18 GHz

System Frequency R	ange	10 kHz – 1 8 GHz
CW Field Strength		10 V/m
Test Distance		1 meter
Amplifier Configurat	on	
	Models: 125A250	, 125 W, 10 kHz - 250 MHz;
	=	

50W1000D, 50 W, 80 - 1000 MHz 30S1G6C, 30 W, 1 - 6 GHz; 20S6G18C, 20 W, 6 - 18 GHz

Antenna Configuration

Models: ATP10K100M, E-Field Generator, 10 kHz - 100 MHz; ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; AH-Systems AH-118 or equivalent, Horn, 1 - 18 GHz

RF Cable Configuration

Three sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

3A001

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit.All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training One week of installation, SAT and Training will be provided by AR Systems Engineers.

Export Classification 3A001

SSMIL10V2M18G

10 V/m field strength for military testing applications from 2 MHz – 18 GHz

System Frequency Range	2 MHz – 18 GHz
CW Field Strength	10 V/m
Test Distance	1 meter

Amplifier Configuration

Models: 50U1000, 50 W, 10 kHz - 1000 MHz; 30S1G6C, 30 W, 1 - 6 GHz; 20S6G18C, 20 W, 6 - 18 GHz

Antenna Configuration

Models: ATP10K100M, E-Field Generator, 10 kHz - 100 MHz; ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; AH-Systems AH-118 or equivalent, Horn, 1 - 18 GHz

RF Cable Configuration

Three sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

Export Classification

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

3A001

SSMIL50V10K18G

50 V/m field strength for military testing applications from 10 kHz – 18 GHz

System Frequency Range	10 kHz – 18 GHz
CW Field Strength	50 V/m
Test Distance	1 meter

Amplifier Configuration

Models: 1200A225B, 1200 W, 10 kHz - 225 MHz; 150W1000B, 150 W, 80 - 1000 MHz; 75S1G6C, 75 W, 1 - 6 GHz; 75S6G18C, 75 W, 6 - 18 GHz

Antenna Configuration

Models: ATP10K100MM2, E-Field Generator, 10 kHz - 100 MHz; ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; AH-Systems AH-118 or equivalent, Horn, 1 - 18 GHz

RF Cable Configuration

Three sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000M3. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

3A001

Export Classification

9	Proc	luct Catalog	2023 For Sa	iles, call: 215.	723.8181 For a	an Applications	Engineer, call:	800.933.8181	arworld.us		78
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

SSMIL50V2M18G

50 V/m field strength for military testing applications from 2 MHz – 18 GHz

System Frequency Range	2 MHz – 18 GHz
CW Field Strength	50 V/m
Test Distance	1 meter

Amplifier Configuration

Models: 1200A225B, 1200 W, 10 kHz - 225 MHz; 150W1000B, 150 W, 80 - 1000 MHz; 75S1G6C, 75 W, 1 - 6 GHz; 75S6G18C, 75 W, 6 - 18 GHz

Antenna Configuration

Models: ATP10K100MM2, E-Field Generator, 10 kHz - 100 MHz; ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; AH-Systems AH-118 or equivalent, Horn, 1 - 18 GHz

RF Cable Configuration

Three sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000M3. AC power is filtered and distributed through an internal power distribution unit.All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

3A001

Export Classification

SSMIL200V10K18G

200 V/m field strength for military testing applications from 10 kHz – 18 GHz

System Frequency Range	10 kHz – 18 GHz
CW Field Strength	200 V/m
Test Distance	1 meter
Amplifier Configuration	

Models: 2500A225B, 2500 W, 10 kHz - 225 MHz; 2000W1000H 2000 W, 80 - 1000 MHz; 125S1G6C, 125 W, 1 - 6 GHz; 75S6G18C, 75 W, 6 - 18 GHz

Antenna Configuration

Models: ATE10K30MAM2, E-Field Generator, 10 kHz - 30 MHz; TDK HPBA-2010, Antenna, 20 - 100 MHz; ATR80M6GM2, Log-Periodic, 80 MHz - 6 GHz; ATH800M6G, Horn, 1 - 6 GHz; ATH6018A, Horn, 6 - 18 GHz

RF Cable Configuration

Four sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000M3. AC power is filtered and distributed through an internal power distribution unit.All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training One week of installation, SAT and Training will be provided by AR Systems Engineers.

Export Classification

SSMIL200V2M18G

200 V/m field strength for military testing applications from 2 MHz – 18 GHz

System Frequency Range	2 MHz – 18 GHz		
CW Field Strength	200 V/m		
Test Distance	1 meter		

Amplifier Configuration

Models: 2500A225B, 2500 W, 10 kHz - 225 MHz; 2000W1000E 2000 W, 80 - 1000 MHz; 125S1G6C, 125 W, 1 - 6 GHz; 75S6G18C, 75 W, 6 - 18 GHz

Antenna Configuration

Models: ATE10K30MAM2, E-Field Generator, 10 kHz - 30 MHz; TDK HPBA-2010, Antenna, 20 - 100 MHz; ATR80M6GM2, Log-Periodic, 80 MHz - 6 GHz; ATH800M6G, Horn, 1 - 6 GHz; ATH6G18A, Horn, 6 - 18 GHz

RF Cable Configuration

Four sets (one for each amp) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000M3. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

3A001

Export Classification

SSMIL200V18G40 200 V/m field strength for from 18 – 40 GHz

System Frequency Rang	e 18 – 40 GHz
CW Field Strength	200 V/m
Test Distance	1 meter
Amplifier Configuration	Models: 40T18G26A, 40 W, 18 - 26.5 GHz; 40T26G40A, 40 W, 26.5 - 40 GHz

Antenna Configuration

Models: ATH18G27A, High Gain Horn, 18 - 26.5 GHz; ATH26G40A, High Gain Horn, 26.5 - 40 GHz

RF Cable Configuration

Internal waveguide with antennas mounted to shielded rack to mimimzie losses.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new laptop as part of overall system. Price includes a 1 year support contract.

Design approach

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Installation, Site Acceptance Testing (SAT) and Training

One week of installation, SAT and Training will be provided by AR Systems Engineers.

Export Classification

3A001



3A001

Conducted Immunity Testing

CI00402 10 kHz - 400 MHz 100 W

Complete Testing Solutions to the following standards:

MIL-STD-461 CS114, DO160 (Section 20) BCI Testing, EN/IEC 61000-4-6, IEC 60601-1-2, EN 50130-4, EN 61000-6-1/2, EN 55024, ISO 11452-4

Internal Test Specifications*

MIL-STD-461 (CS114), DO160 (Sec 20 BCI Test), IEC/EN 60601-1-2, IEC/EN 50130-4, IEC/EN 61326, IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-4-6, CISPR 24/EN 55024, ISO 11452-4, EMC-CS-2009, GM GMW3097, BMW GS95002, Chrysler DC-11224, Renault 36-00-808

Signal Generator Specifications

Frequency Range/Resolution	9 kHz – 1.5 GHz / 0.01 Hz
Power Range/Resolution	-110 to +13 dBm / 0.01 dB
Modulation	AM, FM, Phase, Int Pulse, Ext Pulse

Spectrum Analyzer Specifications

Frequency Range/Resolution	9 kHz – 1.5 GHz / 1 Hz
RF Power CW (max) Atten = 30 dB	20 dBm
Resolution BW	10 Hz – 1 MHz
Video BW	1 Hz – 3 MHz
Amplitude Measurement Range	
-110 dB	m to +20 dBm in 1 dB steps
Preamplifier Gain	20 dB (nom)
Sweep Time, span> 100 Hz	10 msec - 1,500 sec

RF Solid State Amplifier Specifications

Frequency Range	10 kHz – 400 MHz
Power Rating	100 W min.
At 1 c	IB compression the power is 75 W min.
Harmonic Distortion	–20 dBc at 75 W

Mismatch Tolerance

100% of rated power without fold back. Will operate without damage or oscillation with any magnitude of source and load impedance.



Gain	
	50 dB min
Connections	
RF Out	Type N (front)
Monitor Port In	Type N (front)
Signal Generator Out	Type N (rear)
RF Amp In/Out	Type N (rear)
Directional Coupler In	Type N (rear)
Pulse In	BNC (rear)
Communication	USB B (rear)
Directional Coupler Fwd O	ut Type SMA (rear)
Directional Coupler Fwd In	Type SMA (rear)
Directional Coupler Rev Ou	It Type SMA (rear)
Directional Coupler Rev In	Type SMA (rear)
General	
Power 115/23	30 VAC, 50/60 Hz, single phase 16 A
Breaker	2 pole, 20 A
Cooling	Active cooling, air ventilation
Environmental Conditions	10°C – 40°C (50°F – 104°F)
Dimensions 50.3 x 53	3.3 x 55.1 cm (19.8 x 21 x 21.7 in.)
Weight	49.9 kg (110 lb.)
PC Requirements	
Computer	Intel i5 or equivalent
Operating System	Windows 7 SP1, 8.1, or 10
RAM	4 GB Minimum
Screen Resolution	1024 x 768
Ports	2 available USB 2 ports

Software Requirements Microsoft Word/Excel 2010 or newer

CI00403 10 kHz - 400 MHz 175 W

Complete Testing Solutions to the following standards:

MIL-STD-461 CS114, DO160 (Section 20) BCI Testing, EN/IEC 61000-4-6, IEC 60601-1-2, EN 50130-4, ÉN 61000-6-1/2, EN 55024, ISO 11452-4

Internal Test Specifications*

MIL-STD-461 (CS114), DO160 (Sec 20 BCI Test), IEC/EN 60601-1-2, IEC/EN 50130-4, IEC/EN 61326, IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-4-6, CISPR 24/EN 55024, ISO 11452-4, EMC-CS-2009, GM GMW3097, BMW GS95002, Chrysler DC-11224, Renault 36-00-808

Signal Generator Specifications

Frequency Range/Resolution 9 kHz – 1.5 GHz / 0.01 Hz Power Range/Resolution -110 to +13 dBm / 0.01 dB Modulation AM, FM, Phase, Int Pulse, Ext Pulse

Spectrum Analyzer Specifications

•	, ,	
	Frequency Range/Resolution	9 kHz – 1.5 GHz / 1 Hz
	RF Power CW (max) Atten = 30 dB	20 dBm
	Resolution BW	10 Hz – 1 MHz
	Video BW	1 Hz – 3 MHz
	Amplitude Measurement Range	
	-110 dBm t	o +20 dBm in 1 dB steps
	Preamplifier Gain	20 dB (nom)
	Sweep Time, span> 100 Hz	10 msec - 1,500 sec

RF Solid State Amplifier Specifications

10 kHz – 400 MHz Frequency Range Power Rating 175 W min. At 1 dB compression the power is 125 W min. -20 dBc at 150 W Harmonic Distortion

Mismatch Tolerance

100% of rated power without fold back. Will operate withoutdamage or oscillation with any magnitude of source and load impedance.



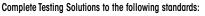
Gain		52.5 dB mir
Connections		
RF Out		Type N (front)
Monitor Port In		Type N (front)
Signal Generator C	ut	Type N (rear
RF Amp In/Out		Type N (rear
Directional Couple	' In	Type N (rear
Pulse In		BNC (rear
Communication		USB B (rear
Directional Couple	Fwd Out	Type SMA (rear
Directional Couple	r Fwd In	Type SMA (rear
Directional Couple	Rev Out	Type SMA (rear
Directional Couple	r Rev In	Type SMA (rear
General		
Power	115/23	0 VAC, 50/60 Hz, single phase 16 A
Breaker		2 pole, 20 A
Cooling		Active cooling, air ventilatior
Environmental Con	ditions	10°C – 40°C (50°F – 104°F
Dimensions	128.9 x 56	.1 x 91.4 cm / 52.5 x 22.1 x 36 ir
Weight		72.6 kg (160 lb
PC Requirements		
Computer		Intel i5 or equivalen

o kequirements	
Computer	Intel i5 or equivalent
Operating System	Windows 7 SP1, 8.1, or 10
RAM	4 GB Minimum
Screen Resolution	1024 x 768
Ports	2 available USB 2 ports
Software Requirements	Microsoft Word/Excel 2010 or newer

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Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	тwт	Systems	Antennas	Accessories	Contact	AR Companies

Conducted Immunity Testing / **Multi-Tone Testing**

CI01000 100 kHz - 1000 MHz 250 W



EN/IEC 61000-4-6, IEC 60601-1-2, EN 50130-4, EN 61000-6-1/2, ISO 11452-4

Internal Test Specifications*

IEC/EN 60601-1-2, IEC/EN 50130-4, IEC/EN 61326, IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-4-6, ISO 11452-4, MIL-STD-461 CS114

Signal Generator Specifications

Frequency Range/Resolution 9 kHz – 1.5 GHz / 0.01 Hz Power Range/Resolution -110 to +13 dBm / 0.01 dB AM, FM, Phase, Int Pulse, Modulation Ext Pulse

Spectrum Analyzer Specifications

Frequency Range/Resolution	9 kHz – 1.5 GHz
	1 Hz
RF Power CW (max) Atten = 30 dB	20 dBm
Resolution BW	10 Hz – 1 MHz
Video BW	1 Hz – 3 MHz
Amplitude Measurement Range	
-110 dBm to +	20 dBm in 1 dB steps
Preamplifier Gain	20 dB (nom)
Sweep Time, span> 100 Hz	10 msec - 1500 sec

RF Solid State Amplifier Specifications

100 kHz – 1000 MHz
250 Watts
175 Watts Minimum
-20 dBc at 75 Watts

Mismatch Tolerance

Contents

100% of rated power without fold back. Will operate without impedance.

Find it Fast

RF Solid State

Gain

onnections	
RF Out	Тур
Monitor Port In	Тур
Signal Generator Out	Тур
RF Amp In/Out	Тур
Directional Coupler In	Тур
Pulse In	I
Communication	US
Directional Coupler Fwd Out	Type S

•

Conne

RF Out	Type N (front
Monitor Port In	Type N (front
Signal Generator Out	Type N (rear
RF Amp In/Out	Type N (rear
Directional Coupler In	Type N (rear
Pulse In	BNC (rear
Communication	USB B (rear
Directional Coupler Fwd Out	Type SMA (rear
Directional Coupler Fwd In	Type SMA (rear
Directional Coupler Rev Out	Type SMA (rear
Directional Coupler Rev In	Type SMA (rear

General

Power	115/230 VAC, 50/60 Hz, single phase 16 A
Breaker	2 pole, 20 A
Cooling	Active cooling, air ventilation
Environmental	Conditions $10^{\circ}\text{C} - 40^{\circ}\text{C} (50^{\circ}\text{F} - 104^{\circ}\text{F})$
Dimensions	128.9 x 56.1 x 91.4 cm (52.5 x 22.1 x 36 in)
Weight	72.6 kg (160 lb.)

PC Requirements

Universal Series

Computer	Intel i5 or equivalent
Operating System	Windows 7 SP1, 8.1, or 10
RAM	4 GB Minimum
Screen Resolution	1024 x 768
Ports	2 available USB 2 ports
Software Requirements	Microsoft Word/Excel 2010 or newer

Microwave

MT2IEC10V3M Multi-Tone RF Radiated Immunity System

The MT2IEC10V3M Multi-Tone system is designed to develop a 1.5 x 1.5 meter uniform field area (UFA) with an 18 V/m CW field strength at up to a 3 meter test distance in accordance with IEC 61000-4-3. This system has an operating frequency range from 80 MHz - 6 GHz. Two internal signal generators allow two simultaneous test frequencies allowing for an up to 50% reduction in sweep time.

The signal generation, control, and power monitoring equipment shall be mounted in a ventilated equipment rack along with the **RF** amplifiers

The MT2IEC10V3M AR System consists of the AR equipment, listed herein. Please refer to individual product specification sheets for details.

The export classification for this equipment is 3A001. This equipment is controlled for export in accordance with the U.S. Export Administration Regulations, Diversion contrary to U.S. law is prohibited.

AR Standardized Systems are customizable upon request. Contact AR for all such requests.

Systems

Complete Testing Solutions to the following standards:

Radiated Immunity

- EN/IEC 61000-4-3 - ISO11452-2 Auto (ALSE) - ISO11452-3 Auto (TEM cells) - ISO11451-5 Auto (Strip Line) - ISO11451 - 2 Full Vehicle – DO–160 Section 20.5 (Substitution Method) - EN/IEC 60601-1, -2 - EN 50130-4 - EN 61000-6-1/2 - EN 55024

Antennas



System Frequency Range	80 MHz - 6 GHz			
Number of Tones	Up to two			
Field Strength				
-	18 V/m CW			
	(10 V/m w/ 80% AM)			
Test Distance	Up to 3 meters			
UFA	1.5 x 1.5 meters			
Amplifice Configuration				

Amplifier Configuration

Models: 250W1000C, 250 W, 80 - 1000 MHz; 75S1G6C, 75 W, 1 - 6 GHz

Antenna Configuration

Models: ATR80M6G, Log-Periodic, 80 MHz - 6 GHz; ATT700M12G, Log-Periodic, 700 MHz - 12 GHz

RF Cable Configuration

Two sets (one for each amp/antenna) consisting of 2 and 5 meter lengths and designated bulkhead feedthroughs for each set.

Software Configuration

System and testing will be controlled using emcware® software which is preloaded and delivered on a new PC as part of overall system.

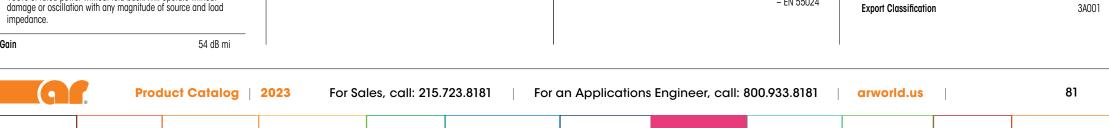
Design Approach

Accessories

Self-contained equipment rack with internal pre-wired RF and power with automatic RF switching via SCP2000. AC power is filtered and distributed through an internal power distribution unit. All RF equipment input and outputs are on rear-panel of devices.

Contact

AR Companies



TWT

Solid State Pulse

Conducted Immunity Testing / **Multi-Tone Testing**

MT4IEC10V3M Multi-Tone RF Radiated **Immunity System**

The MT4IEC10V3M Multi-Tone system is designed to develop a 1.5 x 1.5 meter uniform field area (UFA) with an 18 V/m CW field strength at up to a 3 meter test distance in accordance with IEC 61000-4-3. This system has an operating frequency range from 80 MHz - 6 GHz. Four internal signal generators allow you to four simultaneous test frequencies allowing for an up to 74% reduction in sweep time. The signal generation, control, and power monitoring equipment shall be mounted in a ventilated equipment rack along with the RF amplifiers. The MT4IEC10V3 AR System consists of the AR equipment, listed herein. Please refer to individual product specification sheets for details.

Complete Testing Solutions to the following standards:

Radiated Immunity

ISO11452-2 Auto (ALSE) ISO11452-3 Auto (TEM cells) ISO11451–5 Auto (Strip Line) ISO11451 – 2 Full Vehicle DO-160 Section 20.5 (Substitution Method) EN/IEC 60601-1, -2 EN 50130-4 EN 61000-6-1/2 EN 55024

EN/IEC 61000-4-3



System Frequency Range	80 MHz - 6 GHz
Number of Tones	Up to four
Field Strength	
	18 V/m CW (10 V/m w/ 80% AM)
Test Distance	Up to 3 meters
UFA	1.5 x 1.5 meters
Amplifier Configuration	
Models: 500	DW1000C, 500 W, 80 - 1000 MHz
	125S1G6C, 125 W, 1 - 6 GHz
Antenna Configuration	
	16G, Log-Periodic, 80 MHz - 6 GHz G, Log-Periodic, 700 MHz - 12 GHz
RF Cable Configuration	
Two sets (one for each amp/ante lengths and designated bulkhea	enna) consisting of 2 and 5 meter d feedthroughs for each set.
Software Configuration	
	ntrolled using emcware® software red on a new PC as part of overall system
Design Approach	
power with automatic RF sv filtered and distributed through a	ack with internal pre-wired RF and vitching via SCP2000. AC power is an internal power distribution unit tputs are on rear-panel of devices
Export Classification	3A001





Product Catalog

2023

Universal Series

For Sales, call: 215.723.8181

For an Applications Engineer, call: 800.933.8181

arworld.us

Accessories

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Contents

Find it Fast

RF Solid State

Solid State Pulse Microwave

TWT

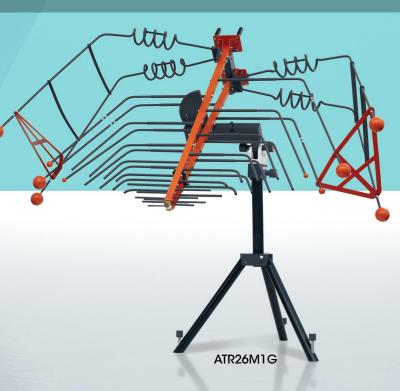
Systems

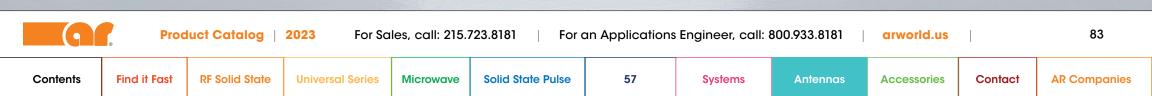
Antennas

Contact

AR Companies

AR offers a wide range of high power, log periodic, high-gain horn, and bent element antennas, and more. With antennas available up to 50 GHz and 20,000 W of input CW power, our innovative antennas offer features available exclusively from AR.





Log-Periodic

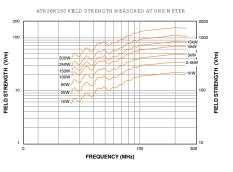
ATR26M250 26 – 250 MHz 15000 W

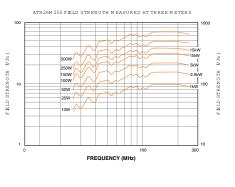
Frequency range	26 – 250 MHz
Power input (max.)	15000 W
Gain (over isotropic)	–3 to +6 dBi (26 – 80 MHz) 6 dBi (80 – 250 MHz)
Gain flatness	±1.5 dBi (80 – 250 MHz)
Impedance	50 ohms nominal
VSWR (max.)	3.5:1 (80 – 250 MHz) 10:1 (26 – 80 MHz)
Beamwidth (average)	Typical curves available on request
Connector	1 5/8 EIA
Size (w x h x d)	279.4 x 53.6 x 202.4 cm (110 x 21.1 x 79.7 in.)
Weight (max.)	31.8 kg (70 lb.)

Mounting

May be mounted in two perpendicular planes using an optional antenna positioner (AP5010B). One non-metallic mast (4 foot) is included for vertical mounting.







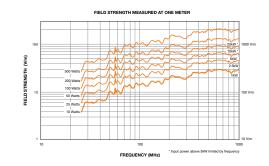
ATR26M1G 26 MHz – 1 GHz 20000 W

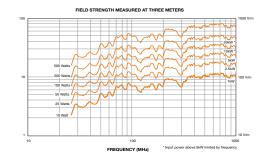
Frequency range	26 MHz-1 GHz
Power input, CW	20 kW @ 26 MHz, derate to 5 kW @ 1000 MHz
Gain (over isotropic)	–8 to 0 dB (26–80 MHz) 0–6 dB (80–1000 MHz)
Gain flatness	±3 dB (80–1000 MHz)
Impedance	50 ohms nomina
VSWR (max.)	6:1 (26–80 MHz) 3.5:1 (80–1000 MHz)
Beamwidth (average)	Typical curves available on reques
Connector	1 5/8 EIA male with removable center bulle
Size (W X H X D)	231 x 66 x 183 cm (91 x 26 x 72 in.)
Weight (max.)	29.5 kg (65 lb.)

Mounting

May be mounted in two perpendicular planes using an optional antenna positioner (AP5010B). One non-metallic mast (4 foot) is included for vertical mounting.







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Log-Periodic

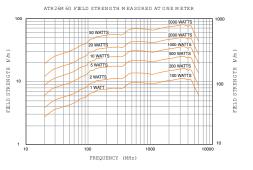
ATR26M6G 26 MHz – 6 GHz 5000 W

Frequency range	26 MHz – 6 GHz
Power input (max.)	5000 W
Gain (over isotropic)	−3 to +6 dBi (26 − 80 MHz) 6 dBi (80 MHz − 6 GHz)
Gain flatness	±1.5 dB (80 – 6 GHz)
Impedance	50 ohms nominal
VSWR (max.)	3:1 (80 – 6 GHz) 10:1 (26 – 80 MHz)
Beamwidth (average)	Typical curves available on request
Connector	Type N (F) quick change connector
Size (w x h x d)	279.4 x 53.6 x 202.4 cm (110 x 21.1 x 79.7 in.)
Weight (max.)	22.7 kg (50 lb.)
Mounting	

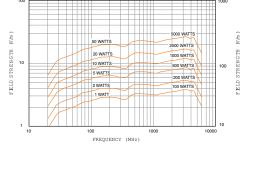
Mounting

May be mounted in two perpendicular planes using an optional antenna positioner (AP5010B). One non-metallic mast (4 foot) is included for vertical mounting.





ATR26M 6G FELD STRENGTH MEASURED AT THREE METERS



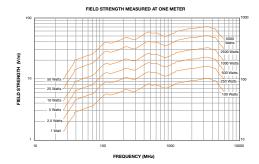
ATR26M6G-1 26 MHz - 6 GHz 5000 W

Frequency range	26 MHz – 6 GHz
Power input (max.)	5000 W
Gain (over isotropic)	-4 to 6 dB (26 - 80 MHz) 6 dB (80 MHz - 6 GHz)
Gain flatness	±1.5 dB (80 MHz – 6 GHz)
Impedance	50 ohms nominal
VSWR (max.)	6:1 (26 – 80 MHz) 3:1 (80 MHz – 6 GHz)
Beamwidth (average)	Typical curves available on request
Connector	Type N (F) quick change connector; Type C (F) supplied for higher power applications
Size (w x h x d)	218.4 x 73.7 x 161.3 cm (86 x 29 x 63.5 in.)
Weight (max.)	13.6 kg (30 lb.)

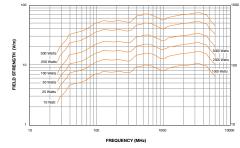
Mounting

May also be mounted using the optional AP5010B antenna ositioner or the TP1000BM3 tripod with ballast tray. Also includes 2 non-metallic masts (4 and 6 feet) vertical mounting.





FIELD STRENGTH MEASURED AT THREE METERS

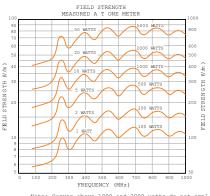


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Log-Periodic

ATL80M1G 80 MHz - 1 GHz 5000 W

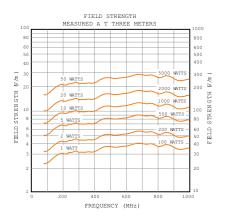
Frequency range	80 MHz – 1 GHz
Power input (max.)	5000 W
Gain (over isotropic)	6.5 dBi min. 7.5 dBi avg.
Gain flatness	±1 dB
Impedance	50 ohms nominal
VSWR (max.)	1.8:1 (max.) 1.5:1 (average)
Beamwidth (average)	E plane 60° H plane 105°
Front to back ratio (min.)	15 dB
Connector	Type N (F) quick change connector Type C (F) supplied for higher power applications
Size (w x h x d)	193 x 13 x 160 cm (76 x 5.1 x 63 in.)
Weight (max.)	7.7 kg (17 lb)
Mounting May be mou	nted using the optional TP1000B tripod.



(m//)

STRENGTH

Note: Curves above 1000 and 2000 watts do not appl past powerfæquency limits of the antenna.



ATR80M6G 80 MHz - 6 GHz 5000 W

Frequency range	80 MHz-6 GHz
Power input (max.)	5000 W
Gain (over isotropic)	6 dBi
Gain flatness	±2 dB
Impedance	50 ohms nominal
VSWR (max.)	3:1 2:1 (typical)
Beamwidth (average)	Typical curves available on request
Connector	Type N (F) quick change connector
Size (w x h x d)	132.1 x 20.32 x 97.8 cm (52 x 8 x 38.5 in.)
Weight (max.)	7.94 kg (17.5 lb.)

Mounting

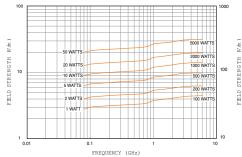
May be tripod mounted in two perpendicular planes using optional tripod. Also includes one non-metallic mast for vertical mounting.







ATR 80M 6G FIELD STRENGTH MEASURED AT THREE METERS



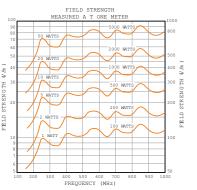
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Log-Periodic

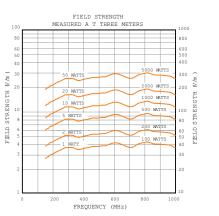
ATL150M1G 150 MHz - 1 GHz 5000 W

Frequency range	9	150 MHz – 1 GHz
Power input (mo	IX.)	5000 W
Gain (over isotro	pic)	6.5 dBi min., 7.5 dBi avg.
Gain flatness		±1 dB
Impedance		50 ohms nominal
VSWR (max.)		1.8:1 (max.) 1.5:1 (average)
Beamwidth (ave	rage)	E plane 60° H plane 105°
Front to back ra	tio (min.)	15 dB
Connector		Type N (F) quick change connector Type C (F) supplied for higher power applications
Size (w x h x d)		102 x 13 x 91 cm (40 x 5.1 x 36 in.)
Weight (max.)		7 kg (15 lb.)
Mounting	May be mo	unted using the optional TP1000B tripod.

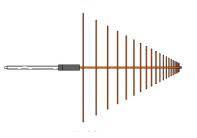




Note: Curves above 1000 and 2000 watts do not app past powerfæquency limits of the antenna.



LP1, LP3 & LP6 200 MHz - 2 GHz 200 MHz - 3 GHz 200 MHz - 6 GHz



Gain	6 dBi typical
Impedance	50 ohms nominal
Connector	Type N female
VSWR	2:1 max.
Polarization	Linear
Max Power	LP1-300 W CW LP3-250 W CW LP6-200 W CW
Size (LxWxH)	48 x 3 x 29.5 in 122 x 8 x 75 cm
Weight	8 lbs. (3.6 kg)
Mounting Tube	22 mm dia. stainless steel
Finish	Orange powdercoat

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Find it Fast

Solid State Pulse

Systems

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Log-Periodic

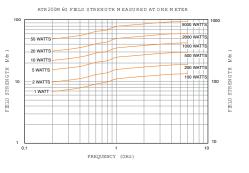
ATR200M6G 200 MHz - 6 GHz 5000 W

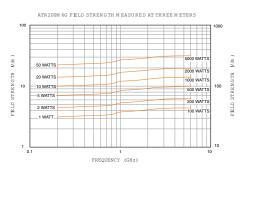
Frequency range	200 MHz – 6 GHz
Power input (max.)	5000 W
Gain (over isotropic)	6 dBi
Gain flatness	±1.5 dB
Impedance	50 ohms nominal
VSWR (max.)	3:12:1 (typical)
Beamwidth (average)	Typical curves available on request
Connector	Type N (F) quick change connector
Size (w x h x d)	82.6 x 17.8 x 57.2 cm (32.5 x 7 x 22.5 in.)
Weight (max.)	5 kg (12 lb.)

Mounting

May be tripod mounted in two perpendicular planes using optional tripod. Also includes one non-metallic mast for vertical mounting.



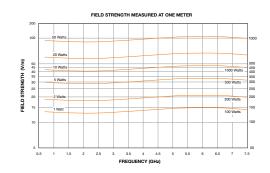


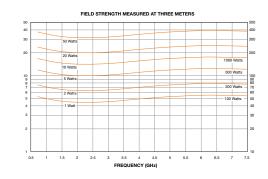


ATT700M8G 700 MHz – 7.5 GHz 1200 W

Frequency range	700 MHz-7.5 GHz				
Power input (max.)	1,200 W				
Gain (over isotropic)	8 dBi typ				
Impedance	50 ohms nominal				
VSWR (max.)	3:1 (max.) 1.7:1 (average)				
Beamwidth (average)	E plane 57 H plane 60				
Connector	7–16 DIN (F)				
Size (w x h x d)	28 x 28 x 56 cm (11 x 11 x 22 in.)				
Weight (max.)	1.8 kg (4 lb.)				
Mounting	May be tripod mounted with included mount				







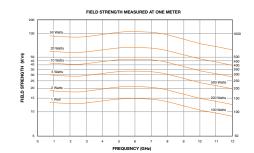
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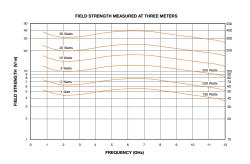
Log-Periodic

ATT700M12G 700 MHz – 12 GHz 600 W

Frequency range	700 MHz – 12 GHz
Power input (max.)	600 W max.
Far Field Gain	8 dBi typ.
Impedance	50 ohms nominal
VSWR (max.)	3:1 (max.) 1.7:1 (average)
3 dB Beamwidth (average)	E plane 57° H plane 60°
Connector	Type N (F)
Size (w x h x d)	28 x 28 x 55 cm (11 x 11 x 21.5 in.)
Weight (max.)	1.7 kg (3 lb., 12 oz)
Mounting	May be tripod mounted with included mount.

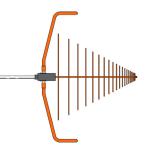






JB1, JB3 & JB6 30 MHz - 2 GHz 30 MHz - 3 GHz 30 MHz - 6 GHz

Frequency Range	JB1 30 MHz – 2 GHz JB3 30 MHz – 3 GHz				
	JB6 30 MHz – 6 GHz				
Impedance	50 ohms nominal				
Connector	Type N female				
VSWR	<2:1 above 200MHz				
Polarization	Linear				
Imbalance	Less than 1 dB				
Max. Power:	See curve in spec sheet				
Size (LxW)	51 x 19 in, 130 x 48 cm				
Wing Span	44 in (112 cm)				
Weight	10 lbs. (5 kg)				
Mounting Tube	22 mm dia. stainless steel				
Wing Mount	Dual compression				
Finish	Orange powdercoat				
Options	SunAR SNAP! Mount				
	Tripod mount				
	Carrying case				



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Horn

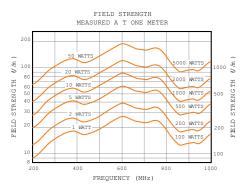
ATH200M1G 200 MHz – 1 GHz 5000 W

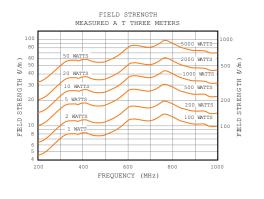
Frequency range	200 MHz – 1 GHz				
Power input (mo	(.) 5000 W				
Gain (over isotro	ic) 10 dBi min typically increasing to 18 dBi at 1000 MHz				
Impedance	50 ohms nominal				
VSWR (max.)	2.5:1 max., 1.5:1 avg.				
Beamwidth (ave	age) Typical curves available on request				
Connector	Type 1–5/8 EIA Flange, Quick Change Connector				
Size (w x h x d)	109.2 x 145.8 x 175.3 cm (43 x 57 x 69 in.)				
Weight (max.)	46 kg (100 lb.)				

Mounting

Heavy-duty tripod included. Pads with 3/8-16 thread for stand mounting vertically or horizontally.







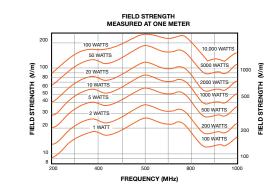
ATH200M1G-1 200 MHz - 1 GHz 10000 W

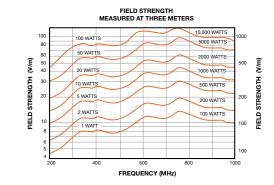
Frequency range	200 MHz-1 GHz
Power input (max.)	10000 W
Gain (over isotropic)	10 dBi min. typically increasing to 18 dBi at 1000 MHz
Impedance	50 ohms nominal
VSWR (max.)	2.5:1 max., 1.5:1 avg.
Beamwidth (average)	Typical curves available on request
Connector	Type 1–5/8 EIA Flange,
Size (w x h x d)	109.2 x 145.8 x 175.3 cm (43 x 57 x 69 in.)
Weight (max.)	46 kg (100 lb.)

Mounting

Heavy-duty tripod is available. Pads with 3/8-16 thread for stand mounting vertically or horizontally.







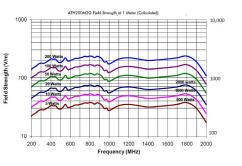
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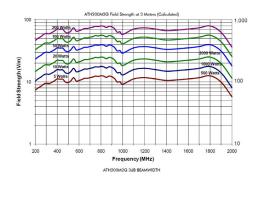
Horn

ATH200M2G 200 MHz – 2 GHz 1000 W

Frequency range	200 MHz – 2 GHz
Power input (max.)	1000 W
Gain (over isotropic)	6 dBi typ.
VSWR (typ.)	2:1
Beamwidth (avg.) E Plane H Plane	(beamwidth graph available on request)
Front To Back Ratio	(min.) 20 dBi
Connector	N (f) Precision
Size (w x h x d)	72.9 x 97.8 x 93.2 cm (28.7 x 38.5 x 36.7 in.)
Weight	10.21 kg (22.5 lb.)







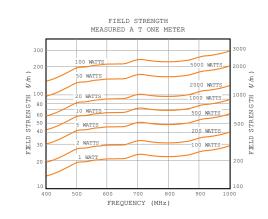
ATH400M1G 400 MHz – 1 GHz 4700 W

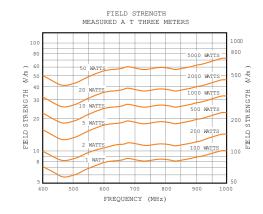
400 MHz – 1 GH				
See graphs in specification				
10 dBi min. typically increasing to 15 dBi at 1000 MHz				
50 ohms nominal				
2.5:1 max., 1.5:1 avg.				
See curve				
Quick Change block See Model Configurations				
56.4 x 79.3 x 73.7 cm (22.2 x 31.2 x 29 in.				
9.1 kg (20 lb.)				

Mounting

Rear flange for wall mount. Pads with 1/4–20 thread for tripod mount.







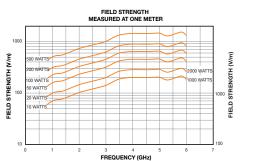
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Horn

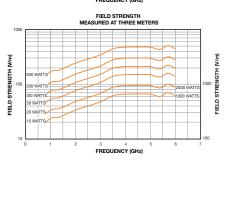
ATH800M6G 800 MHz - 6 GHz 2300 W

800 MHz-6 GHz
2,300 W
(connector dependent)
11 dBi typ,increasing to 22 dBi at 6 GHz
2.5:1
1.6:1
3 dBi down from peak
27.5°
25°
7–16 DIN (F), quick change connector
46.3 x 46.3 x 69.2 cm
(18.25 x 18.25 x 27.25 in.)
7.26 kg (16 lb.)





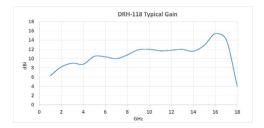
FREQUENCY (GHz)



DRH-118 1-18 GHz 300 W

50 share a serie of
50 ohms nominal
< 1.5:1 average
Type N female
Linear
300 watts
9 x 9.5 x 6 in., 23 x 24 x 15 cm
4 lb., 1.8 kg
½-20 tripod mount
SunAR RF Motion SNAP! Mount Tripod Carrying case





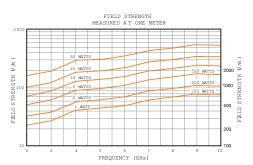
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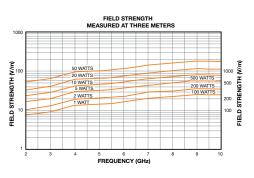
Horn

ATH2G10 2 - 10 GHz 700 W

Frequency range	2 – 10 GHz
Power input (max.)	700 W
Gain	12.5 dBi typ., increasing to 23 dBi at 10 GHz
VSWR (max.)	
Max.	2:1
Average	1.5:1
Beamwidth (avg.) at 3	3 dBi down from peak
E Plane	25°
H Plane	27°
Connector	N (F)
Size (w x h x d)	22.9 x 17.8 x 31.75 cm (9 x 7 x 12.5 in.)
Weight (max.)	1.59 kg (3.5 lb.)



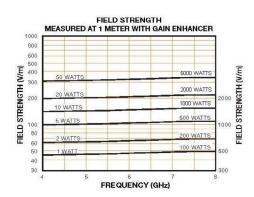


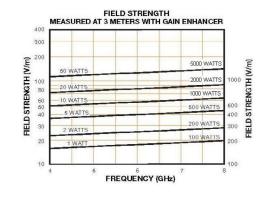


ATH4G8 4 - 8 GHz 1200 W

Frequency range	4 – 8 GHz				
Power input (max.)	1200 W				
Gain	11.5 dBi typ., increasing to 15.9 dBi at 8 GHz				
	17.8 dBi min.,				
	increasing to 21.2 dBi at 8 GHz with gain enhancer				
VSWR (max.)					
Max. Average	1.6:1 1.3:1				
Beamwidth (avg.) at 3 dBi do	wn from peak				
E Plane	18° with gain enhancer				
H Plane	18° with gain enhancer				
Connector	N (F)				
	Quick change connector				
Size (w x h x d)	without gain enhancer 7.62 x 10.3 x 15.14 cm				
	(3.0 x 4.06 x 5.96 in)				
	with gain enhancer:				
	21.6 x 21.6 x 30.5 cm				
	(8.5 x 8.5 x 12 in.)				
Weight (max.)	2.27 kg (5 lb.)				







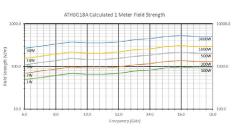
(9)	Proc	luct Catalog	2023 For Sa	les, call: 215.7	723.8181 For o	an Applications	Engineer, call: 8	300.933.8181	arworld.us		93
Contents	Find it Fast	RF Solid State	Universal Series	Microwave	Solid State Pulse	57	Systems	Antennas	Accessories	Contact	AR Companies

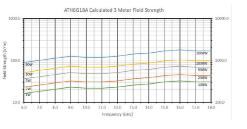
Horn

ATH6G18A 6 - 18 GHz 3000 W

Frequency Range:		6 – 18 GHz
Average Power Input:		3000 W maximum
Peak Power Input:		Consult factory
Far Field Gain (over is	sotropic):	19–25 dBi (see curve)
VSWR:		1.5:1 Typical
Beam Width (3 dB):		17°–7°, E–Plane (see curve) 18°–9°, H–Plane (see curve)
Connector:		RD-650 D28 waveguide, cover nating thru/tapped hole pattern
Weight:		1.13 kg (2.50 lbs)
Size:	19 x 1	3.8 x 33 cm (7.5 x 5.4 x 13 in)
Mounting Provision:		Tripod mounting bracket with ¼–20 tapped hole
Export Classification:		EAR99







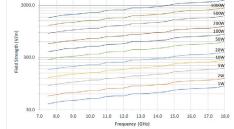
ATH7G18A 7.5 – 18 GHz 2800 W

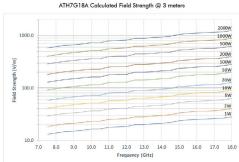
2,800 W
17 dBi typ. increasing to 23.8 dBi at 18 GHz
1.5:1
n from peak
see spec. sheet
WRD-750 waveguide
9 x 10.8 x 20.6 cm
(3.54 x 4.25 x 8.11in).
0.35 kg (0.77 lb.)





2000W







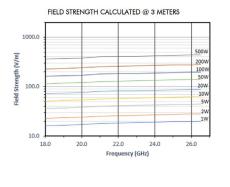
Horn

ATH18G27A 18 - 26.5 GHz 350 W

Frequency range	18 – 26.5 GHz				
Power input (max.)	350 W CW				
Gain	See Graph in Specification				
VSWR	Typical 1.25:1				
Beamwidth (avg.)	See Graph In Specification				
Connector	WR-42 waveguide				
Size (w x h x d)	6.43 x 5.03 x 9 cm (2.53 x 1.98 x 3.54 in)				
Weight (max.)	150 g (5.3 oz)				



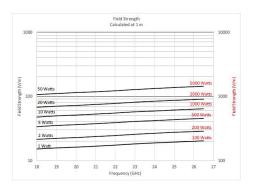
FIELD STRENGTH CALCULATED @ 1 METER 500 1000.0 2001 100W Field Strength (V/m) 0000 50 20V 100 51 11 10.0 -20.0 24.0 26.0 18.0 22.0 Frequency (GHz)

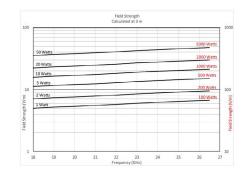


ATH18G27A-1 18 - 26.5 GHz 350 W

Frequency range	18 – 26.5 GHz
Power input (typ.)	350 W CW
Gain	8.8 dBi typ., increasing to 11.3 dBi at 26.5 GHz.
VSWR (max.)	
Max.	1.4:1
Average	1.2:1
Beamwidth (avg.)	
E Plane	57°
H Plane	55°
Connector	WR-42 waveguide
Size (w x h x d)	2.2 x 2.2 x 3.2 cm (0.88 x 0.88 x 1.25 in.)
Weight (max.)	241 g (8.5 oz)







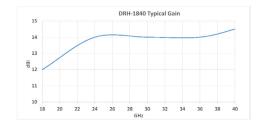
9	Prod	luct Catalog	2023 For So	les, call: 215.7	723.8181 For c	an Applications	Engineer, call: 8	300.933.8181	arworld.us		95
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Horn

DRH-1840 18 - 40 GHz 50 W

Impedance	50 ohms nominal
VSWR	< 1.5:1 average
Connector	Type K female
Polarization	Linear
Max Power	50 watts
Size (LxWxH)	5 x 5 x 3 in., 13 x 13 x 8 cm
Weight	1 lb., .45 kg
Mount	1/4-20 tripod mount
Options	SunAR RF Motion SNAP! Mount Tripod
	Carrying case

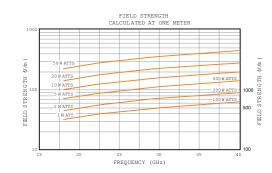


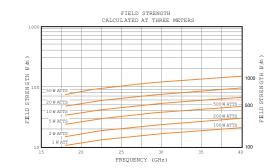


ATH18G40 18 - 40 GHz 450 W

Frequency range	18 – 40 GHz				
Power input (max.)	450 W				
Gain	See Graph				
VSWR (max.)					
Max.	1.5:1				
Average	1.3:1				
Beamwidth (avg.)	See Graph				
Connector	WRD 180 C24 waveguid				
Size (w x h x d)	3.73 x 2.69 x 6.27 cm				
. ,	(1.47 x 1.06 x 2.47 in.)				
Weight (max.)	56.7 g (2 oz)				







()	Prod	uct Catalog	2023 For Sa	les, call: 215.7	723.8181 For a	an Applications	Engineer, call: 8	300.933.8181	arworld.us		96
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Horn

ATH26G40A-1 26.5 - 40 GHz 240 W

Frequency range	26.5 – 40 GHz
Power input (max.)	240 W
Gain (over isotropic)	9 dBi typ.,
	increasing to 12 dBi at 40 GHz.
VSWR	
Max.	1.3:1
Average	1.2:1
Beamwidth (avg.) at 3 dE	Bi down from peak
E Plane	57.5°
H Plane	56.5°
Connector	WR-28 waveguide
Size (w x h x d)	1.9 x 1.9 x 2.54 cm (0.75 x 0.75 x 1.0 in.)
Weight	122 g (4.3 oz)



FIELD STRENGTH

FREQUENCY (GHz)

FIELD STRENGTH CALCULATED AT THREE METERS

> 32 34 FREQUENCY (GHz)

(w/ /)

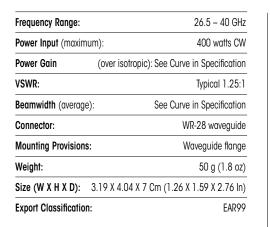
FIELD STRENGTH

STRENGTH (V/m)

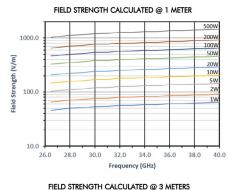
FELD

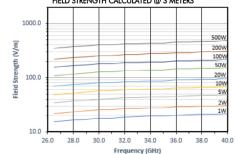
CALCULATED AT ONE METER

ATH26G40A 26.5 - 40 GHz 400 W









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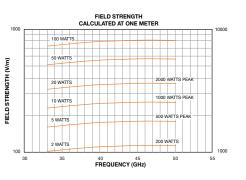
FELD

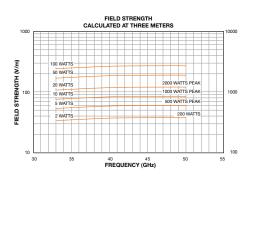
Horn / E-Field Generators

ATH33G50 33 - 50 GHz 240 W

Frequency range	33 GHz – 50 GHz
Power input (max.)	240 W
Gain (over isotropic)	20 ± 2 dBi
VSWR (typ.)	
Average	1.2:1
Beamwidth (avg.) at 3 dBi do	wn from peak
	See graph on spec sheet
Connector	WR-22 waveguide
Size (w x h x d)	4 x 3 x 9 cm
	(1.57 x 1.18 x 3.54 in.)
Weight	0.15 kg (0.33 lb.)



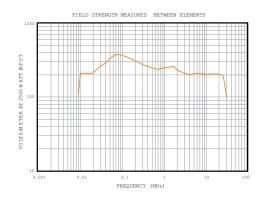




ATE10K25M-1 10 kHz - 25 MHz 3000 W

Frequency Range	10 kHz – 25 MHz					
Power Input (max)	3000 W CW					
Impedance	50 ohms					
VSWR	2:1 max., 10 kHz–20 MHz 3.5:1 max., 20 MHz–25 MHz					
Electric Field Intensity	200 volts/meter					
Connector*	Туре С (F)					
Size (W x H x D)	303.53 x 222.25 x 101.8 cm (119.5 x 87.5 x 40 in.)					
Weight (max.)	113 kg (250 lb.)					





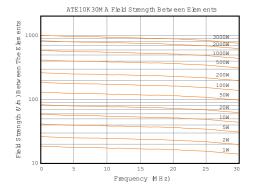
()	Prod	luct Catalog	2023 For Sa	iles, call: 215.7	723.8181 For c	an Applications	Engineer, call:	800.933.8181	arworld.us		98
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E-Field Generators

ATE10K30MA 10 kHz – 30 MHz 1000 W

Frequency range	10 kHz – 30 MHz
Power Input (max)	
without cooling option*	1000 W continuous
with forced-air cooling opti	on* 3000 W, 50% duty cycle
VSWR	
10 kHz-15 MHz	2:1 Max
15 MHz-22 MHz	3:1 Max
22 MHz-30 MHz	5:1 Max
Electric Field Intensity	See graph
Mounting Provisions	UNC ¼–20 tripod thread on 2 sides (optional tripod available)
Size	188 x 72 x 7 cm (74 x 28.3 x 2.5 in.)
(field-	-generating elements are removable for
	storage and transportation)
Weight	
without cooling option	17 kg (38 lb.)
with forced-air cooling	21 kg (46 lb.)
Connector	Type C(F) Quick Change

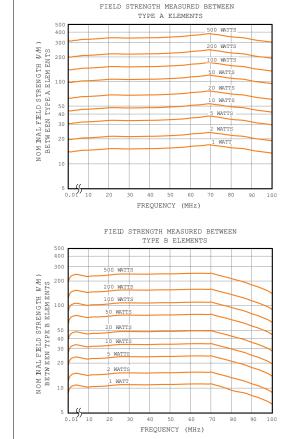




ATE10K100M 10 kHz - 100 MHz 500 W

Frequency range	10 kHz – 100 MHz
Power input	500 W max
Input Impedance	50 ohms nominal
VSWR	2.5:1 max., 1.4:1 typical
Electric field intensity	See graphs
Field Intensity between Type A elements	
	inally 350 V/m with 500 W input
between Type B elements nom	inally 200 V/m with 500 W input
Max. Test Object Volume	
between Type A elements	36 x 46 x 36 cm
	(14 x 18 x 14 in.)
between Type B elements	48 x 46 x 36 cm
	(19 x 18 x 14 in.)
Connector*	Type N (F)
Size	
with Type A elements	74 x 41 x 102 cm
	(29 x 16 x 40 in.)
with Type B elements	104 x 41 x 102 cm
	(41 x 16 x 40 in.)
Weight (max.)	13 kg (28 lb.)
Mounting	Accepts tripod threaded
-	1/4 x 20 stud on three faces



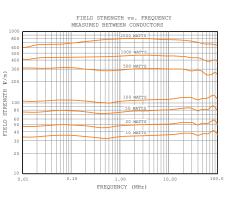


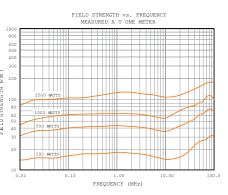
9	Proc	luct Catalog	2023 For Sa	les, call: 215.7	723.8181 For c	an Applications	Engineer, call: 8	800.933.8181	arworld.us		99
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ATP10K100M 10 kHz - 100 MHz 3000 W

Frequency range	10 kHz – 100 MHz		
Power input (max)	3000 W CW		
Input impedance	50 ohms		
VSWR	2:1 max. 10 kHz-100 MHz		
	6:1 max. 10–20 kHz above 1 kW input power		
Electric field intensit	y See Figure		
Connector	See Specification for Model Configurations		
Natural convection to	o 40°C ambient temperature		
Weight	95 kg (210 lb.)		
X	× + × + · \		

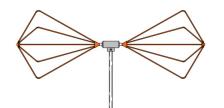




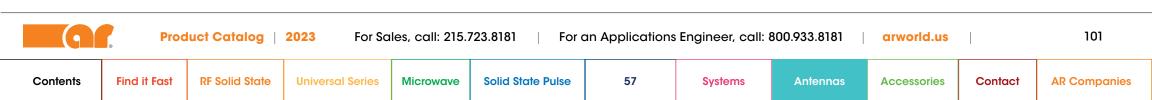




BC1, BC2 & BC5 30-300 MHz



Impedance	50 ohms nominal
Connector	Type N female
Polarization	Linear
Max Power	BC1-1 watt CW max. BC2-50 watts CW max. BC5-500 watts CW max.
Elements	20 in. (51 cm) diameter
Size (LxH)	54 x 32 in, 81 x 137 cm
Weight	5 lbs. (2 kg)
Mounting Tube	22 mm dia. stainless steel
Finish	Orange powdercoat



AR offers a complete selection of test accessories that give you the most reliable results, such as probes, software, system controllers, couplers, and more. Many even make testing quicker, more efficient, and more accurate. They're all matched to our amplifiers to make your setup as easy as possible.

FL8000 Probes and FM7004A

31.93 350.39

190.85

Find it Fast

Product Catalog 2023 For Sales, call: 215.723.8181

Universal Series

For an Applications Engineer, call: 800.933.8181

Stormonitor® Model FM7004A Field Monitor

arworld.us

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RF Solid State

Solid State Pulse Microwave

TWT

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Coaxial Cables

CC1

Armored low-loss microwave cables for applications with frequencies less than 18 GHz, VSWR typically less than 1.35:1

CC2

Armored low-loss microwave cables for applications with frequencies less than 40 GHz. VSWR is typically less than 1.45:1

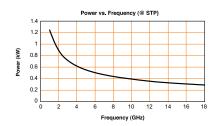
CC4

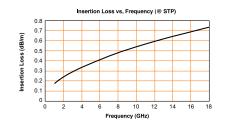
Recommended for AR's high power "A," "W," and "S" series amplifiers or other applications with frequencies less than 6 GHz. VSWR is typically less than 1.25:1.

CC5

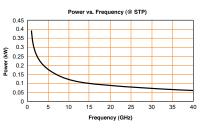
Low-loss microwave cables designed for higher power applications with frequencies up to 11 GHz. VSWR typically less than 1.25:1.

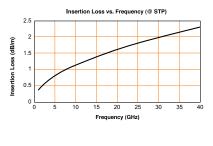






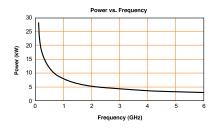




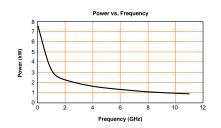


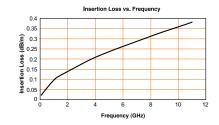












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Dual Directional Couplers and Termination Loads for RF Amplifiers

LR2000M1

LR2000M1

LR2000M1

LR2000M1

Amp	Load Resistor or Attenuator	Dual Directional Coupler	Amplifier
800W	ifiers	I Series Ampl	Universa
500W	LA100	DC3010A	1U1000
1000W	LA100	DC3010A	2.5U1000
2000W	LA100	DC3010A	5U1000
3000W	LA100	DC3010A	10U1000
4000W	LA100	DC3010A	25U1000
6000V	LA100	DC3010A	50U1000
100000	LA150	DC3100A	100U1000A
	LA500	DC3100A	250U1000A
		Call Factory	500U1000
155			
30\$1	iers	l State Amplif	RF Solic
305	LA150	DC3300A	100A400AM20
60S	LA250	DC3400A	150A100D
1255	LA4000	DC2500AM2	1200A225B
2505	LA4000	DC2035A	2500A225C
500S		DC4255	5000A225C
750S1		DC4256	10000A225B
1000\$	LA100	DC3010A	25A250B
20005	LA100	DC2600A	50A250
75\$1	LA150	DC2600A	125A250
12581	LA1000	DC2500AM1	500A250D
25081	LA150	DC3400A	100A400A
3505	LA250	DC3401A	175A400
500S1	LA500	DC3401A	250A400
125\$1	LA500	DC3401A	350A400
250\$1	LA1000	DC3410A	600A400
500S1	LA4000	DC3410A	1000A400
1000\$1	LA100	DC3001A	50W1000D
20\$60		DC6080A	125W1000A
40\$60	LA250	DC6080A	150W1000B
75860	LA500	DC6180A	250W1000C
L			

Amplifier	Dual Directional Coupler	Load Resistor or Attenuator
800W1000	DC6280AM1	
500W1000C	DC6180A	LA1000
1000W1000H	DC6280AM1	LA4000
2000W1000E	DC6380	LA4000
3000W1000B	DC6380M1	LA4000
4000W1000B	DC6380M2	LA4000
6000W1000	DC6430	
10000W1000A	DC6440	
Micro	wave Amplifie	ers
15\$1G6	DC7205A	LA100
30\$1G6C	DC7205A	LA100
30S1G6	DC7205A	
60\$1G6	DC7205A	
125\$1G6	DC7205A	
250\$1G6	DC7230A	
500\$1G6A	DC7215A	
750\$1G6C	DC7240A	
1000\$1G6C	Call Factory	
2000\$1G2z8	DC7128AM6	
75\$1G6C	DC7205A	LA100
125\$1G6C	DC7205A	LA150
250\$1G6C	DC7210A	
350\$1G6A	DC7210A	
500\$1G6C	DC7215A	
125\$1G2z5	DC7144A	LA150
250S1G2z5B	DC7144A	LA500
500\$1G2z5A	DC7154AM1	LA1000
1000\$1G2z5B	DC7164M1	
20\$6G18C	DC7435AM1	LA100
40\$6G18C	DC7435AM1	LA100
75\$6G18C	DC7435AM1	

Amplifier	Dual Directional Coupler	Load Resisto or Attenuato
125\$6G18C	DC7445	
250\$6G18C	DC7445	
Solid State	e Pulsed Amp	olifiers
2000SP0z8G2z5	DC7154A	
12000SP1z2G1z4	DC7128A	
9000SP1z2G1z4	DC7128A	
6000SP1z2G1z4	DC7128A	
18000SP1z2G1z4	Call Factory	
1000SP0z8G2z5	DC7154A	
4000SP0z8G2z5	DC7154A	
8000SP0z8G2z5	DC7128A	
1300SP1G2	DC7154A	
2000SP1G2	DC7154A	
4000SP1G2	DC7128A	
8000SP1G2	DC7128A	
4000SP1z2G1z4	DC7128A	
1500/1000SP1z2G3z1	DC7154A	
1000SP2G4	DC7154A	
2000SP2G4	DC7154A	
5000SP2G4	DC7154AM1	
7000SP2G4	DC7154AM1	
10000SP2G4	DC7154AM1	
4000SP2z7G3z1	Call Factory	
12000SP2z7G3z1	Call Factory	
8000SP2z7G3z1	Call Factory	
TW	T Amplifiers	

DC7281A

DC7281A

DC7276M1

DC7276M1

or or	Amplifier	Dual Directional Coupler	Load Resistor or Attenuator
	200T4G8	DC7281A	
	250T6G18	DC7445	
	250T8G18	DC7450M1	LR1500M1
	500T8G18	DC7450M1	LR1500M1
	1000T8G18B	DC7450M1	LR1500M1
	1500T8G18	DC7450M1	LR1500M1
	40T18G26A	DC7530	
	130T18G26z5B	DC7530	
	200T18G26z5A	DC7530	
	40T26G40A	DC7620	
	130T26z5G40B	DC7620	
	500T6G18	DC7445	
	200T26z5G40A	DC7620	
	70T40G50	DC7820	
	100T40G50	DC7820	
	1000TP8G18	DC7450M1	LR1500M1
	2000TP2G8B	DC7281A	LR2000M1
	2000TP8G18	DC7450M1	
	4000TP2G4	DC7281A	LA500
	4000TP4G8	DC7351	
	4000TP8G12	DC7490	
	20000TP8G12	DC7490	
	3000TP12G18	DC7462	
	5700TP12G18	DC7462	
	6900TP2G4	DC7154AM1	
	7400TP4G8	DC7351	
	8000TP2z7G3z1	DC7154AM1	
	8300TP8G12	DC7490	



300T2G8

500T2G8

1000T2G8B

1500T2G8A

Dual Directional Couplers

DC3300A 4 kHz – 400 MHz 250 W



Frequency Range	4 kHz – 400 MHz
Power (max. W)	250 CW
Flatness (max.)	± 1.5 dB (4 –10 kHz) ± .75 dB (0.01 – 400 MHz)
Coupling Factor (includes flatness)	50 ± 1.5 dB (4 –10 kHz) 50 ± 1 dB (0.01 – 400 MHz)
Directivity	00 10
typical	20 dB
minimum	15 dB
Insertion Loss (max.)	0.2 dB
VSWR (main line)	1.2:1 max.
Connectors	
main line (J1/J2)	N(M)/N(F)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	0.36 kg 0.8 lb
Size (approx.) W x H x D	19.3 x 5.1 x 5.6 cm (7.6 x 2 x 2.2 in.)

DC3510A 9 kHz – 1000 MHz 200 W



Frequency Range	9 kHz – 1000 MHz		
Power (max. W)	200 CW		
Flatness (max.)	± 0.6 dB		
Coupling Factor (includes flatness)	$40 \pm 0.8 \text{ dB}$		
Directivity typical minimum	25 dB 20 dB (0.01 – 1000 MHz) 15 dB (0.009 – 0.01 MHz)		
Insertion Loss (max.)	0.5 dB		
VSWR (main line)	1.3:1 max.		
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)		
Weight (max.)	1.36 kg 3 lb		
Size (approx.) W x H x D	15.7 x 5.8 x 4.3 cm (6.2 x 2.28 x 1.69 in.)		

DC2500AM1 10 kHz – 250 MHz 1000 W



Frequency Range	10 kHz – 250 MHz
Power (max. W)	1000 CW
Flatness (max.)	± 0.9 dB
Coupling Factor (includes flatness)	50 ± 1 dB
Directivity typical minimum	25 dB 20 dB (20 kHz–250 MHz) 18 dB (10 kHz–20 kHz)
Insertion Loss (max.)	0.22 dB
VSWR (main line)	1.2:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	1.13 kg 2.5 lb
Size (approx.) W x H x D	26.6 x 8.1 x 7.6 cm (10.1 x 3.2 x 3 in.)
	(10.1 x 3.2

DC2035A 10 kHz – 250 MHz 3500 W



Frequency Range	10 kHz – 250 MHz
Power (max. W)	3,500 CW
Flatness (max.)	± 0.9 dB
Coupling Factor (includes flatness)	50 ± 1 dB
Directivity	0.5 10
typical	25 dB
minimum	20 dB
Insertion Loss (max.)	0.30 dB
VSWR (main line)	1.2:1 max.
Connectors	
main line (J1/J2)	7-16(M)/7-16(F)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	1.8 kg
• ()	4 lb.
Size (approx.) W x H x D	25.4 x 8.9 x 11.7 cm
	(10 x 3.5 x 4.6 in.)

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DC4255* 10 kHz – 250 MHz 10000 W



Frequency Range	10 kHz – 250 MHz
Power (max. W)	10000 CW
Flatness (max.)	± 1 dB
Coupling Factor (includes flatness)	60 ± 1 dB
Directivity	
typical	25 dB
minimum	20 dB
Insertion Loss (max.)	0.1 dB
VSWR (main line)	1.20:1 max.
Connectors	
main line (J1/J2)	EIA fixed flanges
	1 5/ ₈ in. EIA (M)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	7 kg
· · ·	15.5 lb.
Size (approx.) W x H x D	15.2 x 11.4 x 30.48 cm
	(6 x 4.5 x 12 in.)
*Power required for fan cooling."	

DC4256* 10 kHz – 250 MHz 13000 W



Frequency Range	10 kHz – 250 MHz
Power (max. W)	13000 CW
Flatness (max.)	±1 dB
Coupling Factor (includes flatness)	60 ± 1 dB
Directivity typical minimum	25 dB 20 dB
Insertion Loss (max.)	0.1 dB
VSWR (main line)	1.20:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	EIA fixed flanges 1 ⁵ / ₈ in. EIA (M) N(F)/N(F)
Weight (max.)	7 kg 15.5 lb
Size (approx.) W x H x D	15.24 x 11.43 x 32.38 cm (6 x 4.5 x 12.75 in.)
*Power required for fan cooling."	

DC3400A 10 kHz – 400 MHz 250 W



Frequency Range	10 kHz – 400 MHz
Power (max. W)	250 CW
Flatness (max.)	± 0.5 dB
Coupling Factor (includes flatness)	40 ± 1 dB
Directivity typical minimum	25 dE 20 dE
Insertion Loss (max.)	0.5 dE
VSWR (main line)	1.3:1 max
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.8 kg 1.8 lb
Size (approx.) W x H x D	13.2 x 6.8 x 4.1 cm (5.2 x 2.7 x 1.6 in.)

DC3401A 10 kHz – 400 MHz 500 W



Frequency Range	10 kHz – 400 MHz
Power (max. W)	500 CW
Flatness (max.)	± 0.6 dB
Coupling Factor (includes flatness)	50 dB ±0.8 dB
Directivity typical minimum	25 dB 20 dB
Insertion Loss (max.)	0.5 dB
VSWR (main line)	1.30:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.8 kg 1.8 lb.
Size (approx.) W x H x D	13.2 x 6.8 x 4.32 cm (5.2 x 2.7 x 1.7 in.)

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DC3410A 10 kHz - 400 MHz 2000 W



Frequency Range	10 kHz - 400 MHz
Power (max. W)	2000 CW
Flatness (max.)	±1 dB
Coupling Factor (includes flatness)	50 dB ± 1dB
Directivity minimum	20 dB
Insertion Loss (max.)	0.15 dB max
VSWR (main line)	1.2:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	7 - 16 (M)/7 - 16 (F) N(F)/N(F)
Weight (max.)	1.25 kg 2.75 lb
Size (approx.) W x H x D	18.3 x 5.6 6.9 cm (7.2 x 2.2 x 2.71 in)

DC3010A 10 kHz - 1000 MHz 100 W



Frequency Range	10 kHz – 1000 MHz
Power (max. W)	100 CW
Flatness (max.)	± 0.6 dB
Coupling Factor (includes flatness)	$40 \pm 0.8 \text{ dB}$
Directivity	
typical	25 dB
minimum	20 dB
Insertion Loss (max.)	0.6 dB
VSWR (main line)	1.3:1 max.
Connectors	
main line (J1/J2)	N(M)/N(F)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	0.9 kg
•	2 lb
Size (approx.) W x H x D	12.7 x 5.1 x 3.8 cm
	(5 x 2 x 1.5 in.)

DC3100A 10 kHz - 1000 MHz 500 W



Frequency Range	10 kHz – 1000 MHz
Power (max. W)	500 CW
Flatness (max.)	± 0.5 dB
Coupling Factor (includes flatness)	40 ± 1.5 dB
Directivity	
typical	25 dB
minimum	20 dB
Insertion Loss (max.)	0.45 dB
VSWR (main line)	1.30:1 max.
Connectors	
main line (J1/J2)	N(M)/N(F)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	1.1 kg
- 、 /	2.5 lb.
Size (approx.) W x H x D	17 x 5.8 x 4.3 cm
	(6.7 x 2.27 x 1.69 in.)

DC3001A 100 kHz – 1000 MHz 100 W



Frequency Range	100 kHz – 1000 MHz
Power (max. W)	100 CW
Flatness (max.)	± 0.6 dB
Coupling Factor (includes flatness)	40 ± 0.8 dB
Directivity typical minimum	25 dB 20 dB
Insertion Loss (max.)	0.6 dB
VSWR (main line)	1.3:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.39 kg 0.86 lb.
Size (approx.) W x H x D	12.7 x 5.1 x 3.8 cm (5 x 2 x 1.5 in)

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DC6080A 80 – 1000 MHz 500 W



Frequency Range	80 – 1000 MHz
Power (max. W)	500 CW
Flatness (max.)	± 0.5 dB
Coupling Factor (includes flatness)	40 ± 1 dB
Directivity typical minimum	25 dB 20 dB
Insertion Loss (max.)	0.25 dB
VSWR (main line)	1.2:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.45 kg 1 lb.
Size (approx.) W x H x D	7.62 x 7.62 x 2.77 cm (3 x 3 x 1.09 in.)

DC6180A 80 – 1000 MHz 600 W



Frequency Range	80 – 1000 MHz
Power (max. W)	600 CW
Flatness (max.)	± 0.5 dB
Coupling Factor (includes flatness)	60 ± 1 dB
Directivity typical minimum	25 dB 20 dB
Insertion Loss (max.)	0.15 dB
VSWR (main line)	1.15:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.6 kg 1.2 lb
Size (approx.) W x H x D	10.9 x 6.3 x 3.2 cm (4.3 x 2.5 x 1.3 in.)

DC6280AM1 80 – 1000 MHz 1500 W



Frequency Range	80 – 1000 MHz
Power (max. W)	1,500 CW
Flatness (max.)	±0.5 dB
Coupling Factor (includes flatness)	63 ± 1 dB
Directivity typical minimum	25 dB 20 dB
Insertion Loss (max.)	0.15 dB
VSWR (main line)	1.2:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	7–16(M)/7–16(F) N(F)/N(F)
Weight (max.)	0.6 kg 1.2 lb
Size (approx.) W x H x D	10.9 x 6.3 x 3.2 cm (4.3 x 2.5 x 1.3 in.)

DC6380 80 – 1000 MHz 3000 W



Frequency Range	80 – 1000 MHz
Power (max. W)	3000 CW
Flatness (max.)	± 1 dB
Coupling Factor (includes flatness)	65 dB ± 1.5 dB
Directivity typical minimum	25 dB 20 dB
Insertion Loss (max.)	0.15 dB
VSWR (main line)	1.5:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	EIA fixed flanges 15/ ₈ in. EIA (M) N(F)N(F)
Weight (max.)	1.8 kg 4 lb.
Size (approx.) W x H x D	20.3 x 8.9 x 10.2 cm (8 x 3.5 x 4 in.)

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DC6380M1 80 - 1000 MHz 4500 W



Frequency Range	80 – 1000 MHz
Power (max. W)	4500 CW
Flatness (max.)	± 1 dB
Coupling Factor (includes flatness)	68 ± 1.5 dB
Directivity	
typical	25 dB
minimum	20 dB
Insertion Loss (max.)	0.15 dB
VSWR (main line)	1.5:1 max.
Connectors	
main line (J1/J2)	EIA fixed flanges
	15/ ₈ in. EIA (M)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	
	1.8 kg
	4 lb
Size (approx.) W x H x D	
	20.3 x 8.9 x 10.2 cm
	(8 x 3.5 x 4 in.)

DC6380M2 80 – 1000 MHz 7000 W



Frequency Range	80 – 1000 MHz
Power (max. W)	7000 CW
Flatness (max.)	± 1 dB
Coupling Factor (includes flatness)	70 ± 1.5 dB
Directivity	
typical	25 dB
minimum	20 dB
Insertion Loss (max.)	0.15 dB
VSWR (main line)	1.5:1 max.
Connectors	
main line (J1/J2)	EIA fixed flanges
	15/, in. EIA (M)
coupled (J3/J4)	° N(F)/N(F)
Weight (max.)	1.8 kg
• ()	4 lb.
Size (approx.) W x H x D	20.3 x 8.9 x 10.2 cm
• • • •	(8 x 3.5 x 4 in.)

DC6430 80 – 1000 MHz 15000 W



Frequency Range	80 – 1000 MHz
Power (max. W)	15000 CW
Flatness (max.)	±1dB
Coupling Factor (includes flatness)	68 dB ± 1 dB
Directivity typical minimum	20 dB 18 dB
Insertion Loss (max.)	0.1 dB
VSWR (main line)	1.15:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	EIA fixed/swivel 3 ¹ / ₈ in. EIA (M) N(F)/N(F)
Weight (max.)	3 kg 6.6 lb.
Size (approx.) W x H x D	15.2 x 13.2 cm (6 x 5.2 in.)

DC6440 80 – 1000 MHz 15000 W



80 – 1000 MHz
15000 CW
± 1 dB
70 dB ± 1 dB
20 dB 18 dB
0.1 dB
1.10:1 max.
EIA fixed/swivel 4 ¹ / ₁₆ in. EIA (m) N(F)/N(F)
3.5 kg 7.7 lb
15.2 x 15.8 cm (6 x 6.2 in.)

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DC7144A 0.7 - 4.2 GHz 400 W



Frequency Range	0.7 – 4.2 GHz
Power (max. W)	400 CW
Flatness (max.)	± 0.8 dB
Coupling Factor (includes flatness)	40 ± 1.3 dB
Directivity typical minimum	19 dB 15 dB
Insertion Loss (max.)	0.4 dB
VSWR (main line)	1.25:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.24 kg 0.525 lb.
Size (approx.) W x H x D	2.35 x 5.84 x 19 cm (0.925 x 2.3 x 7.48 in.)

DC7154A 0.7 - 4.2 GHz 400 W



Frequency Range	0.7 – 4.2 GHz
Power (max. W)	400 CW
Flatness (max.)	± 0.8 dB
Coupling Factor (includes flatness)	50 ± 1.3 dB
Directivity typical minimum	19 dB 15 dB
Insertion Loss (max.)	0.4 dB
VSWR (main line)	1.25:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.29 kg 0.64 lb
Size (approx.) W x H x D	3.2 x 6.3 x10.9 cm (1.3 x 2.5 x 4.3 in.)

DC7154AM1 0.7 - 4.2 GHz 700 W



Frequency Range	0.7 – 4.2 GHz
Power (max. W)	700 CW
Flatness (max.)	± 0.8 dB
Coupling Factor (includes flatness)	50 ± 1.3 dB
Directivity typical minimum	19 dB 15 dB
Insertion Loss (max.)	0.4 dB
VSWR (main line)	1.25:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	7–16(M)/7–16(F) N(F)/N(F)
Weight (max.)	0.29 kg 0.64 lb
Size (approx.) W x H x D	3.2 x 6.3 x10.9 cm (1.3 x 2.5 x 4.3 in.)

DC7205A 0.7 - 6 GHz 250 W



Frequency Range	0.7 – 6GHz
Power (max. W)	250 CW
Flatness (max.)	± 0.8 dB
Coupling Factor (includes flatness)	41 ± 1.2 dB
Directivity typical minimum	18 dB 15 dB
Insertion Loss (max.)	0.2 dB
VSWR (main line)	1.2:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.27 kg 0.6 lb
Size (approx.) W x H x D	6.8 x 5.1 x 3.05 cm (2.7 x 2 x 1.2 in.)

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DC7210A 0.7 - 6 GHz 500 W



Frequency Range	0.7 – 6 GHz
Power (max. W)	500 CW
Flatness (max.)	± 1 dB
Coupling Factor (includes flatness)	50 ± 1.2 dB
Directivity minimum	15 dB
Insertion Loss (max.)	0.2 dB
VSWR (main line)	1.35:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	7–16(M)/7–16(F) N(F)/N(F)
Weight (max.)	0.27 kg 0.6 lb
Size (approx.) W x H x D	54.6 x 50.8 x 34.5 mm (2.15 x 2 x 1.36 in.)

DC7230A 0.7 - 6 GHz 500 W



Frequency Range	0.7 – 6GHz
Power (max. W)	500 CW
Flatness (max.)	± 0.5 dB
Coupling Factor (includes flatness)	48 ± 1.5 dB
Directivity	
typical	20 dB
minimum	15 dB
Insertion Loss (max.)	0.2 dB
VSWR (main line)	1.35:1 max.
Connectors	
main line (J1/J2)	N(M)/N(F)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	0.27 kg
	0.6 lb
Size (approx.) W x H x D	5.1 x 5.1 x 2.7 cm (2 x 2 x 1.06 in.)

DC7215A 0.7 – 6 GHz 750 W



Frequency Range	0.7 – 6 GHz
Power (max. W)	750 CW
Flatness (max.)	± 0.5 dB
Coupling Factor (includes flatness)	50 dB ± 1.5 dB
Directivity	
typical	18 dB
minimum	15 dB
Insertion Loss (max.)	0.2 dB
VSWR (main line)	1.45:1 max
Connectors	
main line (J1/J2)	7-16(M)/7-16(F)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	0.27 kg
	0.6 lb.
Size (approx.) W x H x D	5.5 x 5.1 x 3.5 cm
,	(2.15 x 2 x 1.36 in.)

DC7128A 0.8 - 2.8 GHz 1500 W



Frequency Range	0.8 – 2.8 GHz
Power (max. W)	1500 CW
Flatness (max.)	± 0.8 dB
Coupling Factor (includes flatness)	50 ± 1 dB
Directivity typical minimum	25 dB 20 dB
Insertion Loss (max.)	0.2 dB
VSWR (main line)	1.3:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	7–16(M)/7–16(F) N(F)/N(F)
Weight (max.)	0.7 kg 1.5 lb.
Size (approx.) W x H x D	7.6 x 7.6 x 2.9 cm (3 x 3 x 1.125 in.)

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DC7164M1 0.8 - 4.2 GHz 1400 W



Frequency Range	0.8 – 4.2 GHz
Power (max. W)	1400 CW
Flatness (max.)	± 0.8 dB
Coupling Factor (includes flatness)	65 ± 1 dB
Directivity typical minimum	19 dB 15 dB
Insertion Loss (max.)	0.4 dB
VSWR (main line)	1.25:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	7/8 EIA N(F)/N(F)
Weight (max.)	0.91 kg 2 lb.
Size (approx.) W x H x D	5.71 x 8.25 x 15.25 cm (2.25 x 3.25 x 6 in.)

DC7164 0.8 – 4.2 GHz 700 W



Frequency Range	0.8 – 4.2 GHz
Power (max. W)	700 CW
Flatness (max.)	± 0.8 dB
Coupling Factor (includes flatness)	60 ± 1 dB
Directivity typical minimum	19 dB 15 dB
Insertion Loss (max.)	0.4 dB
VSWR (main line)	1.25:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	7/8 EIA N(F)/N(F)
Weight (max.)	0.91 kg 2 lb.
Size (approx.) W x H x D	5.71 x 8.25 x 15.25 cm (2.25 x 3.25 x 6 in.)

DC7200A 1 – 6 GHz 250 W



Frequency Range	1 – 6 GHz
Power (max. W)	250 CW
Flatness (max.)	± 0.8 dB
Coupling Factor (includes flatness)	40 ± 1.2 dB
Directivity typical minimum	18 dB 15 dB
Insertion Loss (max.)	0.2 dB
VSWR (main line)	1.2:1 max
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) N(F)/N(F)
Weight (max.)	0.27 kg 0.6 lb
Size (approx.) W x H x D	6.8 x 5.1 x 3.05 cm (2.7 x 2 x 1.2 in.)

DC7240A 1 - 6 GHz 1200 W



Frequency Range	1 – 6 GHz
Power (max. W) 1 - 5 GHz	1200 CW
5 - 6 GHz	800 CW
Flatness (max.)	± 0.5 dB
Coupling Factor (includes flatness)	60 ± 1.0 dB
Directivity	
minimum	15 dB
Insertion Loss (max.)	0.2 dB
VSWR (main line)	1.45:1 max.
Connectors	
main line (J1/J2)	7-16(M)/7-16(F)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	0.27 kg
	0.6 lb.
Size (approx.) W x H x D	
	5.46 x 5.08 x 3.45 cm
	(2.15 x 2.0 x 1.36 in.)



Dual Directional Couplers

DC7276M1 2.5 - 7.5 GHz 2800 W



Frequency Range	2.5 – 7.5 GHz
Power (max. W)	2800 CW
Flatness (max.)	± 2.5 dB
Coupling Factor (includes flatness)	50 ± 3 dB
Directivity typical minimum	28 dB 25 dB
Insertion Loss (max.)	0.3 dE
VSWR (main line)	1.1:1 max
Connectors main line (J1/J2) coupled (J3/J4)	WRD-250 N(F)/N(F)
Weight (max.)	1.7 kg 3.8 lb
Size (approx.) W x H x D	45.7 x 8.1 x 8.1 cm (18 x 3.2 x 3.2 in.)

DC7281A 2 - 8 GHz 600 W



Frequency Range	2 – 8 GHz
Power (max. W)	600 CW
Flatness (max.)	±1dE
Coupling Factor (includes flatness)	50 dB ± 2 dE
Directivity minimum	15 dE
Insertion Loss (max.)	0.6 dB max
VSWR (main line)	1.40:1 max
Connectors	
main line (J1/J2)	N(M)/N(F)
coupled (J3/J4)	N(F)/N(F)
Weight (max.)	0.25 kg
	0.55 lb
Size (approx.) W x H x D	9.78 x 3.07 x 2.03 cm
··· /	(3.85 x 1.20 x 0.80 in.)





Frequency Range	4 – 8 GHz
Power (max. W)	6000 CW
Flatness (max.)	± 1.5 dB
Coupling Factor (includes flatness)	40 ± 2 dB
Directivity typical minimum	35 dB 30 dB
Insertion Loss (max.)	0.15 dB
VSWR (main line)	1.1:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	WRD-350 N(F)/N(F)
Weight (max.)	1.24 kg 2.75 lb
Size (approx.) W x H x D	45.8 x 4.1 x 6.9 cm (18 x 1.61 x 2.72 in.)

DC7435A 4 - 18 GHz 200 W



Frequency Range	4 – 18 GHz
Power (max. W)	200 CW
Flatness (max.)	± 1.5 dB
Coupling Factor (includes flatness)	35 ± 2.5 dB
Directivity typical minimum	16 dB 10 dB
Insertion Loss (max.)	0.6 dB
VSWR (main line)	1.5:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	N(M)/N(F) SMA(F)/SMA(F)
Weight (max.)	0.34 kg 0.85 lb
Size (approx.) W x H x D	9.47 x 2.54 x 4.78 cm (3.73 x 1.0 x 1.88 in.)

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Accessories **Dual Directional Couplers** DC7490 DC7462 DC7450M1 DC7445 8 - 12 GHz 12 - 18 GHz 6 - 18 GHz 7.5 – 18 GHz 3000 W 1400 W 3000 W 3000 W More of the set of the Binder DCN482 12 - 10 cpm; Binder, helto Nr. Availat 137 - Stade Dr.U.B.A. 7.5 – 18 GHz 12 – 18 GHz Frequency Range **Frequency Range** 8 – 12 GHz Frequency Range 6 – 18 GHz Frequency Range Power (max. W) 3000 CW Power (max. W) 3000 CW Power (max. W) 1400 CW 3000 CW Power (max. W) ± 1.5 dB ± 1.5 dB Flatness (max.) ± 1.5 dB Flatness (max.) Flatness (max.) ±3dB Flatness (max.) $40 \pm 2 \, dB$ Coupling Factor (includes flatness) $50 \pm 2 \, dB$ Coupling Factor (includes flatness) $40 \pm 2 \, dB$ Coupling Factor (includes flatness) Coupling Factor (includes flatness) $48 \text{ dB} \pm 4 \text{ dB}$ Directivity Directivity Directivity Directivity 28 dB 40 dB typical typical typical 30 dB typical minimum 25 dB minimum 35 dB minimum 20 dB minimum Insertion Loss (max.) 0.15 dB Insertion Loss (max.) 0.14 dB Insertion Loss (max.) 0.15 dB Insertion Loss (max.) 0.3 dB max. VSWR (main line) 1.1:1 max. 1.1:1 max. VSWR (main line) 1.1:1 max. VSWR (main line) 1.3:1 max. VSWR (main line) Connectors Connectors Connectors Connectors main line (J1/J2) WR90 main line (J1/J2) WRD-750 D24 main line (J1/J2) WRD-650 main line (J1/J2) coupled (J3/J4) N(F)/N(F)coupled (J3/J4) N(F)/N(F)coupled (J3/J4) N(F)/N(F)coupled (J3/J4) N(F)/N(F)Weight (max.) 0.45 kg Weight (max.) 0.17 kg Weight (max.) 0.64 kg Weight (max.) 0.64 ka 1 lb. 0.38 lb. 1.42 lb. 1.4 lb. 33 x 2.54 x 8.43 cm Size (approx.) W x H x D Size (approx.) W x H x D 30.5 x 3.5 x 4.4 cm Size (approx.) W x H x D Size (approx.) W x H x D 30.5 x 2.9 x 3.5 cm (13 x 1 x 3.32 in.) 28 x 1.8 x 7.6 cm

30 dB

25 dB

WR62

(11 x 0.7 x 3 in.)

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(12 x 1.4 x 1.7 in.)

(12 x 1.13 x 1.4 in.)

Dual Directional Couplers

DC7530 18 - 26.5 GHz 300 W



Frequency Range	18 – 26.5 GHz
Power (max. W)	300 CW
Flatness (max.)	± 1 dB
Coupling Factor (includes flatness)	40 dB ± 2 dB
Directivity	
typical	40 dB
minimum	30 dE
Insertion Loss (max.)	0.20 dB max
VSWR (main line)	1.10:1 max
Connectors	
main line (J1/J2)	WR42
coupled (J3/J4)	K(F)/K(F)
Weight (max.)	204 g
	7.2 oz
Size (approx.) W x H x D	
	22.9 x 2.2 x 3.5 cm
	(9 x 0.88 x 1.4 in.)

DC7620 26.5 – 40 GHz 200 W



Frequency Range	26.5 – 40 GHz
Power (max. W)	200 CW
Flatness (max.)	± 1 dB
Coupling Factor (includes flatness)	40 ± 2 dB
Directivity	
typical	28 dB
minimum	23 dB
Insertion Loss (max.)	0.26 dB max
VSWR (main line)	1.15:1 max.
Connectors	
main line (J1/J2)	WR28
coupled (J3/J4)	K(F)/K(F)
Weight (max.)	113 g
	4 oz.
Size (approx.) W x H x D	14 x 3.5 x 1.9 cm
	(5.5 x 1.4 x 0.75 in.)

DC7820 33 - 50 GHz 200 W



Frequency Range	33 – 50 GHz
Power (max. W)	200 CW
Flatness (max.)	±1 dB
Coupling Factor (includes flatness)	40 ± 2 dB
Directivity typical minimum	32 dB 30 dB
Insertion Loss (max.)	0.15 dB max
VSWR (main line)	1.10:1 max.
Connectors main line (J1/J2) coupled (J3/J4)	WR-22 2.4 mm (F) / 2.4 mm (F)
Weight (max.)	453 g 1 lb
Size (approx.) W x H x D	15.24 x 3.3 x 3.3 cm (6 x 1.3 x 1.3 in.)

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Load Attenuators

LA100



Frequency Range	DC –18 GHz
Power (max.)	100 W continuous to 25°C
Attenuation	40 dB, ±1.0 dB
Input VSWR (max.)	1.25:1 (DC – 8 GHz) 1.35:1 (8 - 12.4 GHz) 1.45:1 (12.4 - 18 GHz)
Connectors Input Output	N(M) N(F)
Ambient Temperature Range	–55°C to 125°C
Operating Position	Horizontal Only
Weight (max.)	320 g 11 OZ
Size (approx.) W x H x D	21.8 x 4.2 x 4.2 cm (8.6 x 1.62 x 1.62 in.)

LA150



Frequency Range	DC – 6 GHz
Power (max.)	150 W continuous to 25°C
Attenuation	40 dB, ±2.0 dB
Input VSWR (max.)	1.1:1 (DC – 2 GHz) 1.2:1 (2 – 6 GHz)
Output VSWR (max.)	1.20:1
Connectors Input Output	N(M) N(F)
Ambient Temperature Range	–55°C to 125°C
Operating Position	Horizontal Only
Weight (max.)	1.13 kg 2.5 lb.
Size (approx.) W x H x D	80 x 80 x 137.1 mm (3.15 x 3.15 x 5.4 in.)

LA500



Frequency Range	DC – 5 GHz
Power (max.)	500 W continuous to 25°C
Attenuation	40 dB ±1.0 dB (DC - 2.5 GHz) 40 dB +0.5/-3 dB (2.5 - 5 GHz)
Input VSWR (max.)	1.15:1 (DC – 2.5 GHz) 1.35:1 (2.5 – 5 GHz)
Output VSWR (max.)	1.15:1 (DC – 2.5 GHz) 1.25:1 (2.5 – 5 GHz)
Connectors Input Output	N(M) N(F)
Ambient Temperature Range	–55°C to 125°C
Operating Position	Horizontal Only
Weight (max.)	3.63 kg 8 lb.
Size (approx.) W x H x D	138.7 x 109.5 x 259.6 mm (5.46 x 4.31 x 10.22 in.)

LA1000



Frequency Range	DC – 3 GHz
Power (max.)	1000 W continuous to 25°C
Attenuation	40 dB ± 0.75 dB (DC - 1.5 GHz) 40 dB +1.5/-0.5 dB (1.5 - 3 GHz)
Input VSWR (max.)	1.15:1 (DC –1.5 GHz) 1.25:1 (1.5 – 3 GHz)
Output VSWR (max.)	1.15:1 (DC – 1.5 GHz) 1.25:1 (1.5 – 3 GHz)
Connectors Input Output	N(F) N(F)
Ambient Temperature Range	–55°C to 125°C
Operating Position	Horizontal Only
Weight (max.)	13.15 kg/29 lb.
Size (approx.) W x H x D	178 x 332 x 451 mm 7.00 x 13.1 x 17.76 in

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Field Monitoring

FL8200/Kit 5 kHz – 200 MHz



Frequency Range	5 kHz – 200 MHz
Axis Type	Separable X–Y–Z Axis
Field Strength Range (Single Range)	0.3 – 500 V/m
Measurement Type	CW, AM & Pulse
Dynamic Range	> 64 dB
Analog Rise Time (10 – 90% Typical)	300 us
Isotropic Deviation (Measured at Ortho Ang	le)
	±0.5 dB @ 10 MHz
Resolution	< 0.1 dB
CW Damage Level	1000 V/m
Pulse Damage Level	5 kV/m (> 0.1% Duty)
Linearity Error ±0.5 dB or ±0.3	V/m (Whichever is greater)
Temperature Stabiliy (Over Operating Temp	perature Range)
	±0.1 dB (Detection Circuit)
±	0.5 dB (Complete System)
Weight	150 g (5.3 oz)
Dimensions (W x H x D)	

42.3 x 52.4 x 52.4 mm (1.66 x 26 x 26 in) 29.2 mm (1.15 in) Spherical housing diameter 16.5 mm (0.65 in) Sensor radome height per axis

FL8009/Kit 20 MHz - 9.3 GHz



Frequency Range		20 MHz – 9.3 GHz
Axis Type		Separable X–Y–Z Axis
Field Strength Range	e (Single Range)	0.5 – 800 V/m
Measurement Type		CW, AM & Pulse
Dynamic Range		> 64 dB
Analog Rise Time (10) – 90% Typical)	300 ns
Isotropic Deviation(N	leasured at Ortho A	ngle)
		±0.5 dB @ 100 MHz
Resolution		< 0.1 dB
CW Damage Level		1000 V/m
Pulse Damage Level		5 kV/m (> 0.1% Duty)
Linearity Error		'm (Whichever is greater) ⊧2 dB 20 MHz – 80 MHz)
Temperature Stabiliy	±(0.1 dB (Detection Circuit)
Weight	±0.	.5 dB (Complete System) 150 g (5.3 oz)
Dimensions (W x H x	·	
	42.3 x 52.4 x 52.4	1 mm (1.66 x 26 x 26 i

12.3 X 52.4 X 52.4 mm (1.66 X 26 X 26 IN) 29.2 mm (1.15 in) Spherical housing diameter 16.5 mm (0.65 in) Sensor radome height per axis FL8018/Kit 20 MHz - 18 GHz



Frequency Range	20 MHz – 18 GHz					
Axis Type	Separable X–Y–Z Axis					
Field Strength Range (Single Range)2 - 1000						
Measurement Type	CW, AM & Pulse					
Dynamic Range	> 54 dB					
Analog Rise Time (10 – 90% Typical) 600 – 2400 ns (amplitude dependen						
Isotropic Deviation(Measured at Ortho Angle) ±0.5 dB @ 100 l						
Resolution < 0.						
CW Damage Level	1200 V/m					
Pulse Damage Level	6 kV/m (> 0.1% Duty)					
Linearity Error ±0.5 dB or	±0.5 V/m (whichever is greater)					
Temperature Stabiliy (Over Opera	ating Temperature Range) ±0.5 dB					
Weight	227 g (8 oz)					
Dimensions (W x H x D) 278 x 6 65 mr	5 x 65 mm (10.9 x 2.6 x 2.6 in) n (2.6 in) Sensor head diameter					

FL8040/Kit 20 MHz - 40 GHz



Frequency Range	20 MHz – 40 GHz			
Axis Type	Separable X–Y–Z Axis			
Field Strength Range (Single Rang	e) 2 – 1000 V/m			
Measurement Type	CW, AM & Pulse			
Dynamic Range	> 54 dB			
Analog Rise Time (10 – 90% Typica 600 –	al) · 2400 ns (amplitude dependent)			
Isotropic Deviation(Measured at O	rtho Angle)			
	±0.5 dB @ 100 MHz			
Resolution	< 0.1 dB			
CW Damage Level 1200				
Pulse Damage Level	6 kV/m (> 0.1% Duty)			
Linearity Error ±0.5 dB o	r ±0.5 V/m (whichever is greater)			
Temperature Stabiliy (Over Operati	ing Temperature Range)			
	±0.5 dB			
Weight	227 g (8 oz)			
Dimensions (W x H x D) 278 x 65 65 m	x 65 mm (10.9 x 2.6 x 2.6 in) im (2.6 in) Sensor head diameter			

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Export Classification:

Field Monitoring

FL8060/Kit 20 MHz - 60 GHz



Frequency Range	20 MHz – 60 GHz				
Axis Type	Separable X–Y–Z Axis				
Field Strength Range (S	ingle Range) 2 – 1000 V/m				
Measurement Type CW, AM					
Dynamic Range	> 54 dB				
Analog Rise Time (10 – 90% Typical) 600 – 2400 ns (amplitude depender					
Isotropic Deviation(Measured at Ortho Angle) $\pm 0.5 \mbox{ dB } @ \ 100$					
Resolution < 0.1					
CW Damage Level	1200 V/m				
Pulse Damage Level	6 kV/m (> 0.1% Duty)				
Linearity Error ±0	0.5 dB or ±0.5 V/m (whichever is greater)				
Temperature Stabiliy (Over Operating Temperature Range) ±0.5					
Weight	227 g (8 oz)				
Dimensions (W x H x D)	278 x 65 x 65 mm (10.9 x 2.6 x 2.6 in 65 mm (2.6 in) Sensor head diamete				

FM7004A



Inputs: Up	to 4 independent probes, through 4 fiber optic FSMA pairs.
Output:	Graphical, color LCD touch display
	IEEE-488 (GPIB)
	USB 2 (test and measurement class)
	RS-232
	Ethernet
Compatible Field Pro	bes All 7000 and 8000 Series field probes
Power Requirements:	
Input voltage	Universal input 90 – 260 VAC, 50–60 Hz
Input current	0.2 – 0.6 Amps
Input type	IEC C14 Inlet with filte
Fuse	1A, 5x20 mm slow blow
Operating Temperatur	re Range: 10°–40°C (50°–104° F) @
	5 – 95% RH noncondensing
Enclosure	Desktop case, 2U high
	les Stores up to 6 different tables (each table one probe); 2 to 30 frequency points per table
Weight	without enclosure 2.3 kg (5 lb)
-	with enclosure 6.7 kg (14.75 lb)
Size (W x H x D)	without enclosure 48.3 x 9 x 25.4 cm
	(9 x 3.5 x 10 in)
	with enclosure 49.8 x 12.7 x 30.5 cm
	(19.6 x 5 x 12 in)

FI8000



PC Interfaces	IEEE-488 (GPIB)						
Ethernet, USB 2.0 Test and Measurement Cla							
RS-232 (1920	0 Baud), Fiber-Optic Serial (19200 Baud)						
F/O Connector Type	E-2000 Compact Duplex						
Application Software	VM7000, emcware						
Laser							
Wavelength	808 nm						
Maximum Output Power	2000 mW						
Class	1						
Shutdown Time	<1 ms After fiber disconned						
	<250 ms After loss of communication						
Power Requirements							
Input Voltage	90 – 260 VAC, 50 – 60 Hz						
Input Current	0.2 – 0.6 A						
Connector Type	IEC C14 Inlet with filter						
Ambient Temperature	10° - 40° C						
Enclosure 2U De	sktop Case with 1U Blank panel installed						
Weight	2.3 kg (5 lb) without enclosure						
•	6.8 kg (15 lb) with enclosure						
Dimensions (W x H x D)	48.3 x 4.4 x 26.9 cm (19 x						
	1.72 x 10.60 in) without enclosure						
50.4 x 11.6 x 30.5 cm	(19.84 x 4.58 x 12.0 in) with enclosure						

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EAR99

Power Heads / Power Meters

PH2000A 10 kHz – 8 GHz



Frequency Range	10 kHz – 8 GHz
Dynamic Range	-60 to +20 dBm
Overload Rating (CW Power)	300 mW
Overload Rating (Peak Power)	1 W for 1 µS
SWR (max.)	10 kHz - 2 GHz, 1.12:1 2 GHz - 4 GHz, 1.20:1 4 GHz - 8 GHz , 1.40:1
Noise (RMS)	80 pW
RF Input	N(M), 50 ohm

PH2005 500 kHz – 18 GHz



500 kHz – 18 GHz
-70 to +20 dBm
300 mW
1 W for 1 µS
500 kHz - 2 GHz, 1.15:1 2 GHz - 6 GHz, 1.20:1 6 GHz - 18 GHz, 1.40:1
30 pW
N(M), 50 ohm

PH2010 30 MHz - 40 GHz



Frequency Range	30 MHz – 40 GHz
Dynamic Range	-70 to +20 dBm
Overload Rating (CW Power)	300 mW
Overload Rating (Peak Power)	1 W for 1 μS
SWR (max.)	30 MHz - 4 GHz, 1.25:1 4 GHz - 38 GHz, 1.65:1 38 GHz - 40 GHz, 2.00:1
Noise (RMS)	30 pW
RF Input	K(M), 50 ohm

PM2003 10 kHz - 40 GHz



10 kHz – 40 GHz, power head dependen
-70 dBm to +44 dBm, powerhead dependen
Three (2 simultaneously viewable
: 1 channel: 200 Readings/Sec 2 channels: 100 Readings/Sec
Up to 90 dB with diode heads, 50 dB with thermocouple heads
Absolute, watts and dBm. Relative, dB
5 digits, nW, μW , mW and W; 4 digits dBn
iracy:
0.23% of full scale. 0.46% of 1/10 full scale
Rear panel HEAD connectors and rear panel IEEE-488 connector standard
ear panel PWR/REF connector, 0 dBm, 50 MHz ECORDER BNC connector, 0 to 10 V into 1 $M\Omega$

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PSP102 4 kHz – 6 GHz

Frequency Range:	4 kHz - 6 GHz
Average Dynamic Range:	-60 to +20 dBm
Pulse Dynamic Range:	-45 to +20 dBm
Internal Trigger Range:	-40 to +20 dBm
Risetime (fast/standard)	2 µs / 1 ms
Maximum Input Power	200 mW or, 1 W for 1µs
VSWR (max.)	0.01 - 2.0 GHz, 1.15:1 2.0 - 6.0 GHz, 1.20:1
RF Input	N(M), 50 ohm



Sampling Techniques:	Real-time/Equivalent time
Continuous sample rate:	25 MHz
Effective sample rate:	1 GHz
Time resolution:	1 ns
Trigger source:	internal or external TTL
External Trigger in/out:	TTL in (slave) or out (master)
Minimum Trigger Width:	4 us
Maximum Trigger Freque	ncy: 120 kHz
Trace Acquisition Speed:	> 30 k sweeps/second
Measurement Speed:	100 k meas/sec (buffered mode) Over USB 1000 meas/sec (continuous)
Remote Connectivity:	USB 2, type B connector
Size (LxWxH):	145 x 43 x 43 mm (5.6 x 1.7 x 1.7 in.)
Power Consumption:	2 W, (USB high power device)

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TP1000B

Load Capacity:	27.2 kg (60 lbs)				
Maximum Height (Approx.): 137 cm (5					
Maximum Height With Longer Mas	st (approximate):				
	203 cm (80 in)				
Minimum Height (Approx.):	89 cm (34.9 in)				
Mast Travel:	(24" MAST) 48.3 cm (19 in)				
	(51" MAST) 45.7 cm (18 in)				
(19″ MA	ST, TP1000BM4) 37.3 cm (14.7 in)				
Tilt Angle:	0-90°				
Pan Rotation:	360°				
Instrument Mounting Screw:	1/4 in. x 20				
Material:	PVC, ABS, nylon				
Weight:	9.7 kg (20.5 lbs)				
Export Classification:	EAR99				



Load Capacity:	10 kg (22 lb.)
Maximum Height (Approx.):	175 cm (69 in.)
Minimum Height (Approx.):	53 cm (21 in.)
Column Travel:	45 cm (18 in.)
Pan Rotation:	360°
Instrument Mounting Screw:	1/4 in. x 20
Material:	Wood
Weight:	2.6 kg (5.7 lb.)
Export Classification:	EAR99

AP5010B



Load Capacit	y:	45.36 kg (100 lbs)
Maximum He	eight (Approx.):	3.31 m (130.25 in)
Minimum He	ight (Approx.):	2.07 m (81.69 in)
Base Leg:	1.53 m (60.42	in); extends to 2.04 m (80.19 in)
Tilt Angle:		0–30°
Material:		Fiberglas, PVC, Delrin, Nylatron
Weight:		45 kg (98 lbs)
Export Class	fication:	EAR99

Visit us online to view additional model options and our antenna mounting adapters.

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Software

emcware®

Features

The emcware® Suite by AR RF/Microwave Instrumentation provides automated Electromagnetic Compatibility (EMC) testing and report generation for all types of users from corporate to professional test laboratories. It is a standalone software application designed to operate on a PC running a Microsoft WindowsTM operating system. The export classification for this software is EAR99. This software is controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

Software Design

The emcware® Suite is designed to be user friendly yet extremely flexible. It is broken up into modules based on different types of EMC testing. Within each module there are predefined standards. The ability to create custom test standards is also provided.

Equipment Management

Contained within the emcware® is a built-in Equipment List Manager. This tool allows for equipment to be entered one time and then accessed from within any of the modules. The Equipment List Manager also keeps track of calibration dates and can warn the user when the calibration date of a specific piece of equipment is approaching.

EUT Monitoring

Use custom equipment or a National Instruments DAQ card to monitor and report the status of the equipment under test (EUT). The National Instruments DAQ device can monitor Analog or Digital levels from the EUT or reset the EUT using the Digital Outputs. Custom equipment, in conjunction with dynamic link library (DLL) files, allows for complete EUT monitoring and control.

Instrument Drivers

Instrument control is provided through AR RF/ Microwave Instrumentation's extensive driver library. Creation of new drivers for equipment that is not currently supported is available upon request. Drivers can also be created and imported by the user in the form of dynamic link libraries (dll) files.

Signal Routing

The emcware® is designed to allow the user to select between manual and automatic signal routing. Automatic signal routing is implemented using one or more AR RF/Microwave Instrumentation Model SC2000 System Controllers.

Reports

Extensive report generation capability is built into each module. These reports can be customized by the user. All reports are created in Microsoft Word or Microsoft Excel.

Help Instructions

A detailed help utility is included with the emcware. The contents of the help instructions can be searched by keyword or topic. Open the help file using the context-sensitive help buttons located throughout the user interface.

Licensing

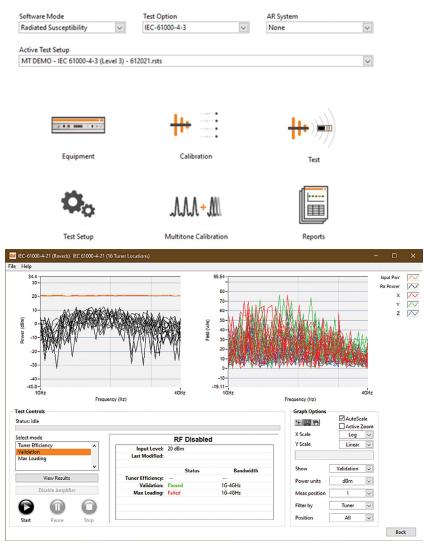
The emcware® is conveniently licensed using a USB hardware dongle that enables full functionality of the software for a single PC.

AR Systems Compatibility

The emcware® can automatically control select AR Systems using built-in equipment setups. See the Compatible Systems for a complete list.

INCLUDED TEST STANDA	RDS, emcware®
Organization	Standard
	CISPR 11
	CISPR 13
CISPR	CISPR 22
	CISPR 25
	CISPR 32
	MIL-STD-461 RS103
	MIL-STD-461 RS103
Department of Defense	(Reverb) MIL-STD-461 CS114
	MIL-STD-461 RE(101, 102)
	MIL-STD-461 CE (101, 102)
	DO-160 Section 20 DO-160 Section 20.6
RTCA	(Reverb)
	DO-160 Section 21
	61000-4-3
	61000-4-6
	61000-4-21
	50130-4
IEC	60601-1-2
	61000-6-1
	61326
	61000-6-2
Telcordia Technologies	GR-1089-Core
International Organiza-	ISO-11452-(2, 3, 5)
tion for Standards	ISO-11452-4
Ford	ES-XW7T-1A278-AC
GM	GMW3097
BMW	GS 95002
Chrysler	DC-11224
Renault	36-00-808
Peugeot	B21 7110

emcugie.



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RF Test System Controllers / Shielded Enclosure Leak Detectors

SC Switch Control Platform SC2000, SCX2000 and SCP2000



Rated Voltage	100 – 240 V AC
Rated Frequency	50 – 60 Hz
Rated Power	100 VA max.
Dimensions W x H x D	48.26 x 13.34 x 44.77 cm (19 x 5.25 x 17.625 in)
Weight SC2000 (without modules) SCX2000 (without modules) SCP2000 (with modules)	approx. 4.1 kg (9 lbs) approx. 3.9 kg (8.5 lbs) approx. 6.8 kg (15 lbs)
Module Slots Number of module slots Number of control buses for modules	5 on rear of unit 5
RF Switch Power Handling	See Spec Sheet
Block Diagram	See Spec Sheet

Shielded Enclosure Leak Detector System CL-105A and CL-106A

The CL-105A/CL-106A Shielded Enclosure Leak Detection System (SELDS) provides a convenient means of testing the electromagnetic shielding effectiveness of EMI enclosures by looking at the most likely points of degradation – the seams, doors, and filter connections. The system consists of a Model CL-105A Transmitter, Model CL-106A Receiver, headphones and a rugged carrying case. The incredible sensitivity of the model CL-105A Receiver allows it to meet the most riaid MIL standards

(e.g. MIL-STD-188/125) for shielded room acceptance.

This system is designed to make relative shielding effectiveness measurements by passing a current along the surface of an EMI

enclosure in order to sense the small magnetic fields formed

The Model CL-105A Transmitter is used to generate an output

signal which is connected to the EMI enclosure under test. This

medium, and large EMI enclosures. An LED indicator illuminates areen when the Transmitter has adjusted the output to the

device has an auto-adjusting output that works with small.

The Model CL-106A Receiver has high sensitivity to detect

enclosure under test. This unit auto-zeros and features an auditory output with varving amplitude related to the shielding

speaker or included headphones. A 4-diait seven seament

provides illumination when used in dark environments.

display is provided to indicate relative shielding effectiveness measurement values in dB. In addition, a built-in LED light source

the smallest of magnetic fields produced at breaks in the EMI

effectiveness. The auditory output is available through the built-in

where breaks in the EMI enclosure may occur.

optimum level for the connected EMI enclosure.



System Interlock SI1000



Wired Interlock, Remote Out, and Relay Connections Molex receptacle, 3–pin, 0.093 in. DIA terminals Mating 3 -pin plug connector and terminals supplied

Fiber Optic Connectors	(2) FSMA for fiber connection
	Compatible with FC2000 Series Cables
Power Requirements	

Dimensions (WxHxD)	48.3 x 4.5 x 17.8 cm (19 x 1.75 x 7 in.)
Enclosure	Rack mount case, 1U high
Input type	IEC inlet with filter
Input Current	0.2–0.6 A
Input Voltage	90–260 VAC, 50–60 Hz
ronor noquironnonno	

Operating Temperature Range

Weight

10°C to 40°C (50°F to 104°F) @ 5% to 95% RH non-condensing

2.5 kg (6.25 lb.)

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AR is a multi-national corporation that's made up of a family of companies, each providing innovative solutions and exceptional support and service. These companies include:

AR RF/Microwave Instrumentation

AR RF/Microwave Instrumentation provides Total RF and EMC Test Solutions by offering customers RF test instrumentation, RF test systems, and EMC test software. In addition to the complete array of product solutions also comes world-class, customerfacing service and applications support.

AR Euro

AR Europe represents AR's deep commitment to the European marketplace. Through a network of partners strategically located throughout Europe, the company supplies systems, antennas, chambers, modules, and power amplifiers for EMC testing and wireless, medical, and industrial applications.

SunAR RF Motion

SunAR RF Motion, manufactures turntables, motorized and manual antenna positioning towers, a system controller, distributed antenna systems (DAS), emission antennas, and reverberation chamber tuners for EMC and wireless testing.

AR Modular RF

AR Modular RF designs and manufactures rack mount and amplifier systems that cover a broad frequency spectrum and offer diverse power ranges. Some of the most innovative, dependable, and durable RF amplifier modules and broadband solid-state RF amplifier systems in the world, these systems are used for communications and medical, scientific, and industrial applications.

With the combined resources of the AR companies, we're able to offer our customers more options, more solutions, and more innovations. In the world of EMC, wireless, and beyond, AR is the one company with infinite solutions.

(ๆ) |

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Solid State Pulse Microwave

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AR EUROPE

Your Partner for All Your Equipment Needs

AR Europe is not just a distribution network; we are a system and solution provider! In collaboration with our third-party sales partners, we supply a broad range of test equipment/ systems for RF/Microwave, EMC, electrical safety, power electronics, test and measurement, and RF shielding applications.

AR Europe is comprised of five AR offices (Ireland, UK, France, Benelux, and Germany) and an extensive network of independent sales representatives' companies. Our network of experienced sales associates and service technicians allows us to provide the best technical solution for our customers' requirements as well as local training, installation, repair, and maintenance support.

With our extensive range of products, services, skills, and experience, AR Europe is the perfect partner for all your test-equipment needs. We have the solutions, from instrumentation to turnkey systems and one-off projects.

A Formidable Force

No one has more experience in all facets of EMC testing equipment than AR Europe and our partners around the world. Working as a team together with our customers, we have the ability to find solutions, solve problems, and provide exceptional service in the most efficient, cost-effective, and timely manner.

With locations throughout Europe, we're nearby and ready to help make EMC testing quicker, easier, and more accurate than ever.

We have developed a very strong customer base in a wide range of electronic/electrical business sectors covering communications, military, commercial, medical, automotive, aerospace, product compliance testing, research, and educational markets.



AR Europe Systems

Your Solution Partner in Europe

AR Europe is not just a distribution network; we are a solution provider. In collaboration with AR RF/Microwave Instrumentation and third-party sales partners, we supply a broad range of test equipment and systems solutions for RF/Microwave applications, EMC, Electrical safety, Power electronics, Test and Measurement, and RF shielding applications.

AR Europe comprises five AR offices (Benelux, France, Germany, Ireland and the UK) and we work with an extensive network of independent sales representatives providing local support across the EMEA region. Our team of experienced sales associates, project engineers and service technicians allows us to provide the best technical solution for our customers' requirements including installation, local training, repair and maintenance support.

With our extensive range of products, services, skills, and experience, AR Europe is the perfect partner for all your test equipment needs. We have the solutions, from instrumentation to full turnkey EMC systems.

AR Europe Systems Through AR/RF Microwave Instrumentation

Our close ties with AR RF/Microwave Instrumentation allow us the ability to offer complete EMC and RF system solutions to an array of customers, requiring systems for military, aerospace, automotive, consumer products, or R&D testing. With an AR system comes the same support and service you have grown accustomed to and trusted throughout the years.

Our Support is as Strong as our Products

Throughout Europe, we have well-equipped service centers staffed by our experienced factorytrained engineers, enabling us to provide high quality local warranty support, repair, and calibration if needed.

With an extensive range of spare parts available in stock we respond quickly, providing a fast turnaround on service helping to minimize your downtime.

Additional services include:

- On-site repair and calibration
- Bespoke service contracts
- Routine maintenance programs
- Management of all your calibration needs (including accredited calibration)
- Shielding effectiveness measurements

Contact your local service centre for more information.

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SunAR RF Motion

SunAR RF Motion

Manufacturers of Positioning Equipment and Antennas for EMC and Wireless Testing

The SunAR RF Motion product line includes precision positioners for EMC testing, antenna measurements, and OTA testing; antennas for EMC and wireless testing, distributed antenna systems (DAS); turntables; and reverberation system design and stirrers for EMC, shielding effectiveness and OTA testing. Formerly known as Sunol Sciences, the Dublin, CA-based company has built a reputation for providing reliable, high performance and high-quality products; characteristics that make it a perfect fit for AR.

Product Overview

- Full line of standard products
- Scalable designs for specific applications
- Turntables
- Antenna masts / positioners / stands
- Reverberation chamber stirrers

EMC and wireless testing Distributed antenna systems

Antennas

(DAS) System controllers

Many SunAR products can be customized to your specifications. Call one of our engineers at (925) 833-9936 to learn about customization options for masts, positioners, stirrers, and turntables.

Features

- Advanced, low-maintenance grounding scheme
- Pit ring with self-cleaning ground plane interface (optional square interface)
- · Exceeds site attenuation requirements
- · Positioning switch located at turntable
- Variable speed standard
- Custom sizes and load ratings available
- All metal construction
- · Variety of deck-mounted component options
- Precision—<.0.5° (greater precision optional)
- Manual and remote operation
- Gear driven
- Scan or continuous rotation
- Extremely low maintenance
- Adjustable height
- Fiber-optic interface





	Flush Mount Turn	ables – Standard	d Models	
Model Number (VS-variable speed)	Diameter, m (ft.)	Distributed Load, kg (lb.)	Caster Load, * kg (lb.)	Min. Pit Depth, mm (in.) **
FM410VS	1.2 (4)	500 (1100)	125 (275)	300 (11.8)
FM1505VS	1.5 (4.9)	500 (1100)	125 (275)	300 (11.8)
FM1511VS	1.5 (4.9)	1000 (2200)	250 (550)	300 (11.8)
FM2005VS	2 (6.6)	500 (1100)	125 (275)	300 (11.8)
FM2011VS	2 (6.6)	1000 (2200)	250 (550)	300 (11.8)
FM2022VS	2 (6.6)	2000 (4400)	500 (1100)	300 (11.8)
FM2044VS	2 (6.6)	4000 (8800)	1000 (2200)	410 (16)
FM2066VS	2 (6.6)	6000 (13200)	1500 (3300)	410 (16)
FM2522VS	2.5 (8.2)	2000 (4400)	500 (1100)	300 (11.8)
FM2544VS	2.5 (8.2)	4000 (8800)	1000 (2200)	410 (16)
FM3022VS	3 (9.8)	2000 (4400)	500 (1100)	300 (11.8)
FM3044VS	3 (9.8)	4000 (8800)	1000 (2200)	410 (16)
FM3066VS	3 (9.8)	6000 (13200)	1500 (3300)	410 (16)
FM4044VS	4 (13.1)	4000 (8800)	1000 (2200)	460 (18)
FM4066VS	4 (13.1)	6000 (13200)	1500 (3300)	460 (18)
FM5044VS	5 (16.4)	4000 (8800)	1000 (2200)	460 (18)
FM5066VS	5 (16.4)	7000 (15400)	1750 (3850)	460 (18)
FM7066VS	7 (23)	6000 (13200)	1500 (3300)	460 (18)
* Caster Load is defined a	as the load evenly distribu	ited on four casters, e	ach separated by at lea	st 46 cm (18 in.)
** Low profi	le models quistem sizes a	nd weight expection		NP1/

** Low profile models, custom sizes and weight capacities available - consult factory

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SunAR Turntables

Surface Mounts



Model	SM46C
Diameter	1.2 m (4 ft.)
Running Load	800 lb.
Table Top Height	2 in. (5 cm)
Model	SM411C
Diameter	1.2 m (4 ft.)
Running Load	1,100 lb.
Table Top Height	3 in. (7.6 cm)
Model	SM2015C
Diameter	2 m
Running Load	1,500 lb.
Table Top Height	3 in. (7.6 cm)
Features	
	No pit required

Indoor/outdoor Non-slip drive belt Cable access between turntable top and bottom Fiber optic interface Sefl-cleaning, fixed rollers Non-conductive Variable speed standard <0.5 degree position accuracy

Free Space FS121



12 in. diameter deck	
Non–conductive deck and riser	
36 in. height	
EUT load rating:	10 lb.
Variable speed:	0–6 rpm
Soft start/stop	
<1° resolution and repeatability	
Low RF cross section	
Portable	
RS-232 control from PC	
Hollow riser tube for cable access	
Simple ASCII command set	
Precision stepper motor drive	
Electromechanical home switch	
120 or 230 VAC, 50-60 Hz	

Free Space FS241



stomer
s standard (Custom heights available)
~45 kg (100 lb.)
~2.2 rpm (custom speeds
hing a single button ntroller or by sending via the GPIB port
<0.25°
•
<0.25°

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TWR99 & TWR95



1 - 2.5 meter (TWR99) and 1 - 4 meter (TWR95) antenna height standard, 1 – 6 meter optional

Electric height adjustment

1 cm height resolution, 0.1m/sec speed

Pneumatic polarization, 0-90°, standard (70-150 PSI CDA required), 1/4" NPT male hose needed

Safety brake

Zero maintenance

Total height (2.5 m scan): 116" (~295 cm)

Total height (4 m scan): ~180" (~457 cm)

Absolutely no conductive material above motor box

Strong, stable construction

Fiber optic interface standard (62.5/125 duplex ST)

Easy assembly/disassembly

Maximum antenna load (may require counterweight)		
	TWR95: 35 lb. (~16 kg)	
	TWR99: 30 lb. (~14 kg)	
120V/230VAC 50/60Hz 64/2x44		

TWR95 base size:	48" x 48" (1.2 m x 1.2 m)
TWR99 base size	30" x 36" (.76 m x .76 m)
• • • • • • • • • • • • • • • • • • •	.9.11



TLT2



1
5.5 m (18′)
4 m or less
34 kg (75 lbs)
2, 5, 10 or ~12 cm/s
1 cm
±0.5 cm
20/230 VAC, 50/60 Hz, 4 A

TLT 3



Automated height, tilt, and polarization

Tower Height	4.65 m (15'3")
Focal Point Height	4 m or less
Load Capacity	5.5 kg (12 lbs)
Speed	2, 5, 10 or ~12 cm/s
Height Resolution	1 cm
Height Precision	±0.5 cm
Supply Voltage	120.230 VAC, 50/60 Hz, 4 A

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Antenna Positioning Stand APS-2



Model	APS- 2
Ideal for pre-compliance	
Maneuverable	
Remove Controlled Polarization	
Brake Winch - Height Adjustment	
Lightweight	
Exceptionally Stable	
Antenna Height Adjustment:	1-2.5 meters

Find it Fast

Elevation over Azimuth ELAZ75



Allows for heavy EUT loads in both elevation (75 lb.) & azimuth (600 lb.)

Variable speed in both elevation & azimuth

Continuous rotation allowed in both elevation & azimuth (with optional components)

Low RF cross-section materials above drive units

Portable (no permanent installation necessary)

Remote azimuth drive option

Height customer-defined Fiber-optic connections to controller (requires SC110V System Controller)

GPIB full control

Custom EUT mounts

Universal Series

Optional RS-232 control

Elevation Positioner EL75



The EL75 provides EUT rotation about a horizontal axis

Allows for heavy EUT loads in elevation (75 lb.)

Variable speed

Continuous rotation allowed in elevation

Low RF cross-section materials above drive unit

Portable (no permanent installation necessary)

Height customer-defined

Fiber-optic connections to controller (requires or SC110V System Controller)

GPIB full control

Custom EUT mounts

Optional RS-232 control

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Elevation over Azimuth ELAZ-2B



B	1. A.		7 1 1 1 1 1 1		4.1.1.1.1.1.1
Designed for	wireless	testing o	of battery	powered	aevices

EUT load rating: 2 lb.

Variable speed: 0-6 rpm

Continuous rotation in both elevation & azimuth

Low RF cross-section

Portable (no permanent installation necessary)

RS-232 control from PC

Fiber-optic interface

Simple ASCII command set

Custom EUT mounts

Precision stepper motor drive

Optional turntable deck with 20 lb. load capacity

System	Controllers
SC110V	1



indepe	del SC110V system controller provides fully ndent control of up to three positioning devices and Illy programmable auxiliary devices.
0.01 ci	n of degree resolution
Variabl	e speed control through front panel or GPIB interface
Fiber o	ptic interface; ST connectors
Rack m	ount option
115 or	230 volts AC
Compa	tible with industry standard automation software
Remote	e upgradeable firmware
Configu	Ire Options Purchase one, two, or three channel units; each has one channel of full device control plus one auxiliary channel

Visit us online to view additional model options

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AR Modular RF

AR Modular RF

for Tactical Booster Amplifiers, RF

Systems and Modules

AR Modular RF designs, manufactures and distributes some of the most innovative, dependable, and durable RF Amplifier Modules and broadband solid-state RF amplifier systems in the world. These products play a critical role in wireless and radio communications, military communications, electronic warfare, electronic countermeasures, homeland security, and have a variety of medical, scientific, and industrial applications.

- RF Amplifier Modules: 0.01 6000 MHz, 5 500 W.
- Broadband, narrowband and custom designs available
- Military Amplifier Systems and Accessories
- Booster Amplifiers and RF Jammer Amplifiers for tactical military radios from 30 512 MHz and from 1.2 1.9 GHz
- Power Amplifiers for legacy communication designs as well as virtually every new & emerging communications system



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AR Modular RF: Military Products

AR-20 30 - 512 MHz 20 W



Power Output	20 CW, 20 WPEP
Frequency Range	30 MHz-512 MHz
Input Power 2V	V CW or PEP for full 20W output
SATCOM Rx LNA	Built-in
SATCOM Rx LNA Gain/Noise Figu	re 12 dB/<2.5 dB typical
SATCOM Rx Co-site Filter >35 dB protection	Co-Site filter provides to the SATCOM receive channels
Modulation	All Legacy and Modern complex tactical communications waveforms like ANW2, IW, and SRW
Power Requirements	12–35.5 VDC single XX90 battery or 12 and 28 VDC vehicle supply
Current@24 VDC nominal	<3.2A Amps @ 28 V typical
Operating Temperature	-30 to +60° C Ambient
Water	IP67
Vibration/Shock/Humidity	Designed to meet applicable sections of MIL STD 810/ designed for ground/base vehicle use
Size (HxWxD) Inches	1.58 x 3.75 x 55 in.
Weight	1 lb. 10 oz
JITC Certified	Yes
GSA Schedule	Yes



Power Output	20 CW, 20 WPE
Frequency Range	30 MHz-512 MH
Input Power	2W CW or PEP for full 20W output
SATCOM Rx LNA	Built-ii
SATCOM Rx LNA Gain/Noise I	Figure 12 dB/<2.5 dB typico
SATCOM Rx Co-site Filter >35 dB protecti	Co-Site filter provide on to the SATCOM receive channel
Modulation	All Legacy and Moder complex tacticc communications waveform like ANW2, IW, and SRV
Power Requirements	12–35.5 VDC single XX90 battery or 12 and 28 VDC vehicle suppl
Current@24 VDC nominal	<3.2A Amps @ 28 V typico
Operating Temperature	-30 to +60° C Ambien
Water	IP6
Vibration/Shock/Humidity	Designed to meet applicable sections of MIL STD 810 designed for ground/base vehicle use
Size (HxWxD) Inches	1.58 x 3.75 x 55 in
Weight	2 lb. 15 oz (Full Kit
JITC Certified	Ye
GSA Schedule	Ye

AR-20B 30 - 512 MHz 20 W

Power Output	20 CW, 20 WPEP
Frequency Range	30 MHz-512 MHz
Input Power	2W CW or PEP for full 20W output
SATCOM Rx LNA	N/A
SATCOM Rx LNA Gain/Noise	Figure N/A
SATCOM Rx Co-site Filter	N/A
Modulation	All Legacy and Modern complex tactical communications waveforms like ANW2, IW, and SRW
Power Requirements	12–35.5 VDC single XX90 battery or 12 and 28 VDC vehicle supply
Current@24 VDC nominal	<3.2A Amps @ 28 V typical
Operating Temperature	-30 to +60° C Ambient
Water	IP67
Vibration/Shock/Humidity	Designed to meet applicable sections of MIL STD 810/ designed for ground/base vehicle use
Size (HxWxD) Inches	1.58 x 3.75 x 55 in.
Weight	1 lb. 10 oz
JITC Certified	No
GSA Schedule	Yes



Power Output	20 CW, 20 WPEP
Frequency Range	30 MHz-512 MHz
Input Power	2W CW or PEP for full 20W output
SATCOM Rx LNA	N/A
SATCOM Rx LNA Gain/Noise Figure	N/A
SATCOM Rx Co-site Filter	N/A
Modulation	All Legacy and Modern complex tactical communications waveforms like ANW2, IW, and SRW
Power Requirements	12–35.5 VDC single XX90 battery or 12 and 28 VDC vehicle supply
Current@24 VDC nominal	<3.2A Amps @ 28 V typical
Operating Temperature	-30 to +60° C Ambient
Water	IP67
Vibration/Shock/Humidity	Designed to meet applicable sections of MIL STD 810/ designed for ground/base vehicle use
Size (HxWxD) Inches	1.58 x 3.75 x 55 in.
Weight	2 lb. 15 oz (Full Kit)
JITC Certified	No
GSA Schedule	Yes

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AR Modular RF: Military Products

AR-20H 30 - 512 MHz 20 W



Power Output	20 CW, 20 WPEP
Frequency Range	30 MHz-512 MHz
Input Power	Nominal 2W–5W CW or PEP for full 20W output
SATCOM Rx LNA	Built-in
SATCOM Rx LNA Gain/Noise Figure	6 dB/4 dB typical
SATCOM Rx Co-site Filter	N/A
Modulation	All Legacy and Modern complex tactical communications waveforms like ANW2C and SRW
Power Requirements	18 to 35.5 VDC compliant to MIL-STD-704F, , MIL-STD 461F, MIL-STD 464C
Current@24 VDC nominal	<3.2A Amps @ 24 V typical
Operating Temperature	-40 to +71° C Ambient
Water	IP67
Vibration/Shock/Humidity	MIL-STD-810G
Size (HxWxD) Inches	1.86 x 3.75 x 8.78 in.
Weight	2.6 lb.
JITC Certified	No
GSA Schedule	Yes

AR-20EP 225 – 450 MHz 20 W



Power Output	20 CW, 20 WPEF	
Frequency Range	225 MHz – 450 MHz	
Input Power 2	2W CW or PEP for full 20W output	
SATCOM Rx LNA	Built-ir	
SATCOM Rx LNA Gain/Noise Fig	gure 12 dB/4 dB typica	
SATCOM Rx Co-site Filter	N/A	
Modulation	All Legacy and Moderr complex tactica communications waveforms	
Power Requirements	12 to 35.5 VDC	
Current@24 VDC nominal	<3.2A Amps @ 24 V typica	
Operating Temperature	-30 to +60° C Ambient	
Water	IP67	
Vibration/Shock/Humidity	MIL-STD-81	
Size (HxWxD) Inches	1.58 x 3.75 x 55 in	
Weight	1 lb. 10 oz	
JITC Certified	Nc	
GSA Schedule	Yes	

AR-20HC2 300 - 500 MHz 20 W

Power Output	20 CW, 20 WPEP
Frequency Range	300 MHz – 500 MHz
Input Power Nominal 0.75W–3W C	W or PEP for full 20W output
SATCOM Rx LNA	Built-in
SATCOM Rx LNA Gain/Noise Figure	10 dB/2.5 dB typical
SATCOM Rx Co-site Filter	Yes
Modulation	All Legacy and Modern complex tactical communications waveforms like FSK, ANW2C and SRW
Power Requirements	9.5 to 36 VDC
Current@24 VDC nominal	<3.2A Amps @ 28 V typical
Operating Temperature	-40 to +70° C Ambient
Water	IP67
Vibration/Shock/Humidity	MIL-STD-810
Size (HxWxD) Inches	1.86 x 3.75 x 8.78 in.
Weight	2.6 lb.
JITC Certified	No
GSA Schedule	Yes



Power Output	35 watts CW nominal; 35W PEP with 70% AM modulation
Frequency Range	30 MHz – 512 MHz
Input Power	3W PEP typical for 35W PEP Output
SATCOM Rx LNA	N/A
SATCOM Rx LNA Gain/Nois	e Figure N/A
SATCOM Rx Co-site Filter	N/A
Modulation	AM, FM, or PM, and Tactical communications waveforms
Power Requirements	13.8 VDC –33 VDC, from two BAXX90 Batteries or 12 and 24 VDC vehicle systems, filtered and transient protected
Current@24 VDC nominal	5.5 Amps nominal
Operating Temperature	-30 to +60° C
Water	66 ft for 20 min
Vibration/Shock/Humidity	MIL STD 810F/Hand portable
Size (HxWxD) Inches	2.30 x 30 x 7.70 in.
Weight	2 lb.
JITC Certified	No
GSA Schedule	Yes

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AR Modular RF: Military Products

AR-50 30 - 512 MHz 50 W

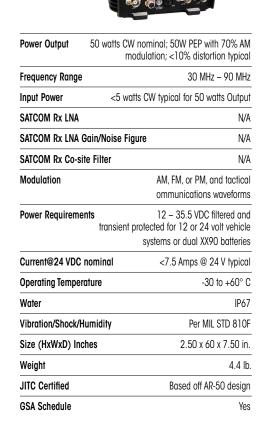


Power Output		CW nominal; 50W PEP with on; <10% distortion typical
Frequency Range		30 MHz – 512 MHz
Input Power	<5W (CW typical for 50W Output
SATCOM Rx LNA		Built-in
SATCOM Rx LNA Ga	in/Noise Figure	12 dB/2.5 dB typical
SATCOM Rx Co-site 239-2		Band pass frequency nd rejection >45 dB typical
Modulation		All Legacy and Modern complex tactical ommunications waveforms like ANW2, WNW, and SRW
Power Requirements		12 – 36 VDC, from Battery C vehicle systems. Filtered and transient protected
Current@24 VDC no	minal	7.5 Amps nominal
Operating Temperatu	ıre	-30 to +60° C
Water		IP67
Vibration/Shock/Hun	nidity	Per MIL STD 810G (Including SB-X10001B)
Size (HxWxD) Inche	s	2.50 x 60 x 7.50 in.
Weight		4.4 lb.
JITC Certified	PSC-5E), PRC-117G, PRC-148 JEM
GSA Schedule		Yes

AR-50RC 225 - 450 MHz 50 W

Power Output	l	OS: 25 watts CW nominal; 25W PEP with 70% AM
	modulatio	on; <10% distortion typical
		MHz to 320 MHz): 50 watts
		,
Frequency Range		30 MHz – 512 MHz
Input Power <5 watts C	W typical for 25W	LOS and 50W SATCOM Output
SATCOM Rx LNA		Built-in
SATCOM Rx LNA Gain/	Noise Figure	12 dB/2 dB typical
SATCOM Rx Co-site Fil 239 MHz-27		Band pass frequency and rejection 35 dB typical
Modulation		AM, FM, or PM, and tactical ommunications waveforms
Power Requirements	ransient protecte	12 – 35.5 VDC filtered and ed for 12 or 24 volt vehicle ems or dual XX90 batteries
Current@24 VDC nomi	nal	<7.5 Amps @ 24 V typical
Operating Temperature	1	-30 to +60° C
Water		IP67
Vibration/Shock/Humid	lity	Per MIL STD 810F
Size (HxWxD) Inches	2.50 x 60 x 7.50 in.	
Weight		4.4 lb
JITC Certified		Based off AR-50 design
GSA Schedule		Yes

AR-50RCS 30 - 90 MHz 50 W



AR-50S 30 - 88 MHz 50 W

Power Output	50 watts CW nominal; 50W PEP with 80% AM modulation; <10% distortion typical
Frequency Range	30 MHz – 88 MHz
Input Power	<5 watts CW typical for 50 watts Output
SATCOM Rx LNA	N/A
SATCOM Rx LNA Gain/Noi	ise Figure N/A
SATCOM Rx Co-site Filter	N/A
Modulation	AM, FM, or PM, and Tactical communications waveforms
Power Requirements	12 – 36 VDC filtered and transient protected for 12 or 24 Volt vehicle systems or dual XX90 batteries
Current@24 VDC nomina	<7.5 Amps @ 24 V typicall
Operating Temperature	-30 to +60° C
Water	IP67
Vibration/Shock/Humidity	Per MIL STD 810Fe
Size (HxWxD) Inches	2.50 x 60 x 7.50 in.
Weight	4.4 lb.
JITC Certified	Based off AR-50 design
GSA Schedule	Yes

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AR Modular RF: Military Products

AR-50SE 30 - 88 MHz 50 W



Power Output	50 watts CW nominal; 50W PEP with 80% AM modulation; <10% distortion typical		
Frequency Range	30 MHz – 88 MHz		
Input Power	<5 watts CW typical for 50 watts Output		
SATCOM Rx LNA	N/A		
SATCOM Rx LNA G	Rx LNA Gain/Noise Figure N/A		
SATCOM Rx Co-site	ATCOM Rx Co-site Filter N/		
Modulation	AM, FM, or PM, and Tactical communications waveforms		
Power Requiremen	Its 12–33 VDC, MIL-STD-461E and 1275		
Current@24 VDC n	ominal <7.5 Amps @ 24 V typicall		
Operating Tempera	ture -40 to +55°C		
Water	IP67		
Vibration/Shock/Hu	umidity Per MIL STD 810F		
Size (HxWxD) Inch	nes 2.50 x 6.50 x 9.93 in.		
Weight	8 lb.		
JITC Certified	Based off AR-50 design		
GSA Schedule	Yes		

AR-55L 1250 – 1800 MHz 20 W



Power Output	45W PEP (+2 dB	3 / -1 dB), typical across the band, with 5W PEP input
Frequency Range		1,250 – 1,800 MHz
Input Power		2–5 W PEP
SATCOM Rx LNA		Built-in
SATCOM Rx LNA Ga	in/Noise Figure	12 dB/<3.5 dB typical
SATCOM Rx Co-site	Filter High pass	Filter, Out of band rejection 40 dB typical
Modulation	Сог	nstant Envelope Waveforms
Power Requirement	s 28 VDC filtered and transient protected	
Current@24 VDC no	ominal	7 Amps @ 28 V typical
Operating Temperat	ure	-30 to +60° C Ambient
Water		IP67
		o meet applicable sections or ground/base vehicle use
Size (HxWxD) Inche	es	2.5 x 6 x 7.5 in.
Weight		6 lb.
JITC Certified		No
GSA Schedule		Yes

AR-75 30 – 512 MHz 75 W



Power Output	75						
		watts CW nominal; 75 W PEP with 70% M modulation; <10% distortion typica					
Frequency Range)	300 MHz – 512 MHz					
Input Power 5	-8 watts CW typical f	or nominal 75 watts Output					
SATCOM Rx LNA		Built-in					
SATCOM Rx LNA	Gain/Noise Figure	12 dB/2 dB typical					
SATCOM Rx Co-s		s frequency 239–273 MHz, band rejection 45 dB typical					
Modulation	C	AM, FM, or PM, and Tactical communications waveforms					
	r 24 volt vehicle syste	.5 VDC filtered and ransient ms batteries MIL-STD 1275 C-DC internal power supply					
Current@24 VDC	nominal	<9.5 Amps @ 24 V typical					
Operating Tempe	rature	-40 to +70° C Ambient					
Water		IP67					
Vibration/Shock/I	Humidity	Per MIL STD 810F					
Size (HxWxD) In	ches	30 x 60 x 11.17 in					
Weight		10.5 lb.					
JITC Certified		No					

AR-75-M50 30 - 512 MHz 50 W

Power Output							
	50W PEP 70% DOM; <1	Nominal 50 watts CW; 0% distortion <5% typical					
Frequency Ran	ge	30 MHz – 512 MHz					
Input Power	~5–7 watts CW t	ypical for 50 watts Output					
SATCOM Rx LN	A	Built-in					
SATCOM Rx LN	A Gain/Noise Figure	 ~5–7 watts CW typical for 50 watts Outpu Built-in Moise Figure 12 dB/2 dB typica Iter Band pass frequence ~273 MHz, Out of band rejection 45 dB typica M, FM, or PM, and modern Tactical networking communication waveforms 18–35.5 VDC filtered and transien 4 volt vehicle systems batteries; MIL-STD 1278 1 compliant DC-DC internal power supply filte inal < 9.5 Amps @ 24 V typica e -30 to +60° C 					
SATCOM Rx Co 23	••	Band pass frequency nd rejection 45 dB typical					
Modulation	AM, FM, or PM, and modern Tactical networking communication waveforms						
	d for 24 volt vehicle system	s batteries; MIL-STD 1275					
Current@24 VD	OC nominal <	< 9.5 Amps @ 24 V typical					
Operating Temp	perature	-30 to +60° C					
Water		IP67					
Vibration/Shocl	k/Humidity	Per MIL STD 810F					
	,	Per MIL STD 810F 30 x 60 x 11.17 in.					
Size (HxWxD)	,						
Vibration/Shocl Size (HxWxD) Weight JITC Certified	,	30 x 60 x 11.17 in.					

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AR Modular RF: Military Products

AR-125R 30 – 512 MHz 125 W



Power Output	125 watts CW typical					
Frequency Range	30 MHz – 512 MHz					
Input Power 10 watts ty	ypical, up to 20W without damage					
SATCOM Rx LNA	External/KMW2030P					
SATCOM Rx LNA Gain/Noise Fig	gure 12 dB/2 dB typical					
SATCOM Rx Co-site Filter	N/A					
Modulation AM/FM/PM, SINC	GARS, HPW, HAVEQUICK, DAMA, IW, SRW and ANW2, plus others					
	AC power: 100-240 VAC, 50-60 Hz DC (approx. 650 watts @ 24 VDC)					
Current@24 VDC nominal	27 Amps typicall					
Operating Temperature	-30 to +60° C (ambient)					
Water	No					
Vibration/Shock/Humidity	Per MIL-STD-461					
Size (HxWxD) Inches	3.5 x 19 x 24 in.					
Weight	~ 25 lb.					
JITC Certified	No					
GSA Schedule	Yes					

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AR Modular RF: Commercial Products

AR-5010 30 MHz - 88 MHz 500 W CW/PEP



Basic Communications

Lightweight, 19-in., 2U rack mount

Ethernet remote control

AR-5030/AR-5030C2 700 MHz - 960 MHz 80 W CW/PEP



Shipboard Communications

Lightweight, 19-in., 2U Rack Mount

Ethernet remote control

AR-5000 80 kHz - 1 GHz 100 - 500 W CW 1000 W peak



Base Platform for Quick Customizations
Class A or Class AB
Lightweight 19-in., 2U rack mount
Ethernet remote control

Modules for OEMs and Integration 10 kHz - 6 GHz



High- and low-gain power amplifier modules

Mini-system PA modules with ALC and interfaces

Subsystems for Integration



Custom packaging

Engineered to customer specifications

Sub-octave and multi-octave designs

Communication Systems Up to 1000 W output



VHF/UHF band operation

24/7 operation capable

TWT

Repeatable performance unit to unit for field interchangeability

Single-phase and three-phase AC power capable from same unit

Systems

Physics Applications



Custom frequency band

Highly repeatable performance unit to unit

Multiple calibrated monitoring ports

Highly reliable for long-term 24/7 use

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AR Modular RF: Commercial Products

	Rack Mount Amplifiers	
Model	Frequency Response	Maximum Output Power (W)
KAA1020	10 kHz – 230 MHz	25
KAW1080	10 kHz – 1000 MHz	25
KAA5170P	500 kHz – 5.5 MHz	1000 Pulse
KAA2030	500 kHz – 40 MHz	200
KAA2020	500 kHz – 100 MHz	100
KAW1020	500 kHz – 1000 MHz	5
KAA4020	1 – 50 MHz	500
KAA4021P	1 – 50 MHz	300 Pulse
KAW1050	1 – 400 MHz	25
KAW1040	1 – 512 MHz	20
KAA3020	2 – 32 MHz	100
AR-5010	30 – 88 MHz	500
KAA2070-M11	70 – 76 MHz	300
AR-5000	80 - 1000 MHz (Call factory for details)	100 - 500
KAW5030	100 – 400 MHz	200
KAW2040	100 – 500 MHz	100
KAW2300	100 – 1000 MHz	100
KAW2020	200 – 500 MHz	100
KAW2100-M2	200 – 500 MHz	200
KAW2020-M16	220 – 245 MHz	100
KAW5050	225 - 400 MHz	1000 PEP, 500 CW
KAW4040-M12	390 – 410 MHz	500
KAA2030-M11	500 kHz	300
AR-5030	700 – 960 MHz	80
AR-5030C2	700 – 960 MHz	80
KAA2026	700 kHz – 3 MHz	125

Amplifier Modules								
Model	Frequency Response	Maximum Output Power (W)						
KMA2020	10 kHz - 230 MHz	100						
KMA2040-M25	100 KHz – 50 MHz	100-500						
KMA1040	200 KHz – 50 MHz	50						
KMA2040	500 kHz – 40 MHz	200						
KMA2040-M12	500 kHz – 40 MHz	200						
KMA2040P	500 kHz – 40 MHz	200 (CW)						
KMW1020	500 kHz – 512 MHz	10						
KMW1060	1 – 512 MHz	20						
KMA2040-M22	2 – 30 MHz	200 CW, 250 Peak						
KMA4040	30 – 40 MHz	400						
KMW2026-M5	30 – 512 MHz	30						
KMW2026-M20	30 – 512 MHz	100-200						
KMW2025	30 – 512 MHz	100-200 CW, 500 Pulse						
KMA1001	225 – 400 MHz	1						
KMW2040-M17	225 – 400 MHz	100						
KMW2040-LTE	225 – 400 MHz	100 CW, 125 Peak						
KMW2026-M15	225 – 450 MHz	40						
KMW2026-M26	291 MHz	60						

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- 3. Delmarva Engineering Crownsville, MD 410-990-9000

Charlottesville, VA 410-990-9000

- 4. EQS Systems, LLC Chesterland, OH 800-729-8084
- 5. Brennan Associates Saint Petersburg, FL 727-446-5006

Delray Beach, FL 727-446-5006

Seffner, FL 727-446-5006

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6. DyTec/Midwest Inc. Rolling Meadows, IL 847-255-3200

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- 7. Testech Sales Engineers Richardson, TX 972-644-5010
- Austin, TX 972-644-5010

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9. PSI Solutions Inc. Tacoma, WA OR, SW WA, ID, and MT 253-838-9263

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San Diego, CA 310-643-6977

11. ACA TMetrix Inc. Mississauaa, ON Canada 800-665-7301

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We believe local after sales support and service are essential, and we strive to provide the best service possible.

Our highly trained technicians maintain equipment so that even older or rebuilt AR products continue to perform the same as they did on Day 1. There are rebuilt AR amplifiers over 20 years old that are still going strong and delivering precision results.

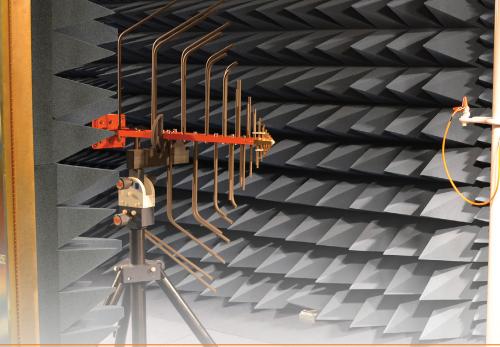
You can depend on AR's service from calibration and regular maintenance to troubleshooting and repairs.

Three-Year, No Questions Asked Warranty

We set a new standard when introducing our three-year warranty (one-year warranty for TWTs and powerheads). It's easy to stand behind your products when their quality is unsurpassed. Making sure that AR products exceed your expectations is our goal. We do whatever it takes to achieve that.

In the US, contact AR's Customer Service Department at 215.723.0275 or service@arworld.us. Outside of the US, contact the AR distributor nearest you.





	Basic Warranty	Assured	Enhanced	Performance
Technical Support (HW and SW)				
Email / Phone Case Response Time	24 hrs.	8 hrs	4 hrs	2 hrs
24 x 5 Technical Support				•
On–Site Post–Sales Support				4
Hardware Support				
Repair Service Coverage Turnaround Time	15 business days	14 business days	10 business days	7 business days
Calibration Service Turnaround Time	15 business days	10 business days	5 business days	3 business days
Firmware Release and Updates	✓	~	✓	✓
Spare Parts/Consignment Inventory			optional	✓
Product Maintenance	optional	optional	optional	optional
Software Support				
Updates and Maintenance Releases	~	~	✓	✓
Proactive Release Notification	✓	✓	~	✓
Success Services				
Customer Success Manager-Advocate, Escalation Point			~	✓
Onboarding and Support Performance Metrics Report		Annual	✔ Bi-Annual	Quarterly

Response time based on AR standard business hours and hardware support turnaround time excludes component lead time.
 AR Software Agreement required for software support.

3. All the offered services are subject to availability of capabilities in country and legal terms and conditions.

4. Contact your local AR sales representative for more information.

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AR's Competitive Edge

At AR, there's no substitute for customer responsiveness. It's the foundation of our business and the AR value that's recognized around the globe. It's one of the key reasons AR has become the worldwide leader in EMC, wireless and beyond.

AR products do more, last longer, work harder, and make your job easier. And that gives you a fierce competitive edge. Only AR delivers innovative technology, advanced design, quality build and workmanship, mismatch capability, durability and longevity, less cost per watt, and a worldwide support network that's here for you today and tomorrow. With the combined resources of all the AR companies, we simply have more of the best people making the products to overcome your toughest challenges.

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or Europe

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CI Global Promise

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