

Model SSIEC30V2M

- 80 MHz 6 GHz
- 54 V/m CW up to 2 Meter Test Distance
- 1.5 x 1.5 Meter UFA

Features:

- Customized to meet your needs
- Performance guarantee
- Global support and service

Application Standards:

IEC 61000-4-3 Testing

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AR RF/Microwave Instrumentation 160 Schoolhouse Rd Souderton, PA 18964 215.723.8181 info@arworld.us www.arworld.us ISO 9001:2015 Certified ISO 17025:2017 Accredited The SSIEC30V2M System is designed to develop a 1.5 x 1.5 meter uniform field area (UFA) of up to 54 V/m CW up to a 2m test distance for IEC 61000-4-3 testing from 80MHz-6GHz. The signal generation, control, and power monitoring equipment shall be mounted in a ventilated equipment rack along with the RF amplifiers.

The SSIEC30V2M 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.



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Model SSIEC30V2M System Summary Requirements

Parameter	Description		
System Frequency Range	80 MHz - 6 GHz		
CW Field Strength	54 V/m CW (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	Two RF amplifiers were chosen for this test system: Model 500W1000C: 80 – 1000 MHz, 500 W Model 250S1G6C: 1 – 6 GHz, 250 W		
Antenna Configuration	Dedicated antennas for each amp to provide optimal field generation and field uniformity: Model ATR80M6G: 80 – 1000 MHz Model ATT700M8G: 1 – 6 GHz bands.		
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	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		
Assumptions: 3 dB power margin on amplifiers to accommodate reasonable chamber and system losses. Field Strength calculations are based on free-space conditions.			



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Model SSIEC30V2M Equipment List

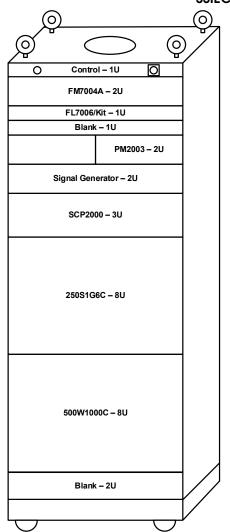
Component	Quantity
Model 500W1000C-R-N-R-N-NE, Amplifier, 80 – 1000 MHz, 500 W CW	
Model 250S1G6C-R-N-R-N-NE-SPR, Amplifier, 700 MHz – 6 GHz, 250 W CW	1
Model DC6180A, Dual Directional Coupler, 80 – 1000 MHz, 600 W CW	1
Model DC7210A, Dual Directional Coupler, 0.7 - 6 GHz, 500 W CW	1
Model SCP2000M3, System Controller, DC – 18 GHz	1
Model PM2003, Power Meter	1
Model PH2000A, Power Head, 10 kHz - 8 GHz	2
Signal Generator, 9 kHz – 6 GHz (Keysight N5171B-506 with options -1EM, -UNT, -UNW, -1CM110A)	
Model FM7004AM1 Field Monitor, 4 channel	1
Model FL8009/KitM1 Electric Field Probe, 20 MHz - 9.3 GHz, 0.5-800 V/m	1
Model PS2000B, Probe Stand	1
Model ATR80M6G, Radiant Arrow Antenna, 80 MHz – 6 GHz, 5000 W CW	1
Model ATT700M8G, Trapezoidal Log Periodic, 700 MHz - 12 GHz, 600 W CW	1
Model 10006774, Antenna Adapter for TP1000B with ¼"-20 thread bolt to antenna	1
Model TP1000B, Non-metallic Tripod	1
All internal interconnect cables between system components	Included
Model UG-30D/U, Bulkhead Feed-through, Type N female	
Model BF7160, Bulkhead Feed-through, Type 7/16 female	1
Model CC41111020, Low Loss Coaxial cable, N male connectors, 2 m	1
Model CC41111050, Low Loss Coaxial cable, N male connectors, 5 m	1
Model CC41313020, Low Loss Coaxial cable, 7/16 male connectors, 2 m	
Model CC41313050, Low Loss Coaxial cable, 7/16 male connectors, 5 m	
Test System Control PC	
Model emcware® Radiated Susceptibility, Conducted Immunity, and Emissions Test Software*	
emcware® 1-year support contract*	

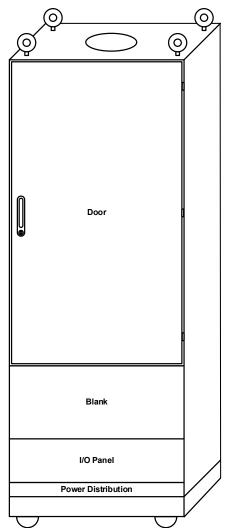
 $^{{}^{\}star}\text{Model emcware}{}^{\scriptscriptstyle{(0)}}\text{ and service contract to be quoted as separate line items and are therefore not included in the price of the system.}$



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SSIEC30V2M Control Rack





Front Rear

Control Rack Specifications		Units
Cizo (LLv.M.v.D.)	150.52 x 56.03 x 91.44	cm
Size (H x W x D)	59.26 x 22.06 x 36	in
Mojobt	123.7	kg
Weight	272.75	lb
Power Input	240 VAC, 1-phase, 30 A	

AR RF/Microwave Instrumentation • 160 Schoolhouse Rd, Souderton, PA 18964

To order AR Products, call: 215.723.8181. For an applications engineer, call: 800.933.8181. Direct to Service call: 215.723.0275 or email: service@arworld.us

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