



AR System

Model MT4IEC10V3

- Four-Tone Capable, Reducing Sweep time by up to 74%
- 80 MHz – 6 GHz
- 18 V/m CW at up to 3 Meter Test Distance
- 1.5 x 1.5 Meter UFA

Features:

- Customizable to meet your needs
- Global support and service

Application Standards:

- IEC 61000-4-3 Testing

The MT4IEC10V3 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.

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.

To view our full portfolio, visit:
www.arworld.us/systems

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ISO 9001:2015 Certified
ISO 17025:2017 Accredited



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Model MT4IEC10V3 System Summary Requirements

Parameter	Description
System Frequency Range	80 MHz – 6 GHz
CW Field Strength	18 V/m CW (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	Two RF amplifiers were chosen for this test system: Model 500W1000C: 80 MHz – 1000 MHz, 500 W Model 125S1G6C: 1 – 6 GHz, 125 W
Antenna Configuration	Dedicated antennas for each amp to provide optimal field generation and field uniformity: Model ATR80M6G: 80 – 1000 MHz Model ATT700M12G: 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.
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 MT4IEC10V3 Equipment List

Component	Quantity
Model 500W1000C-R-N-R-N-NE, Amplifier, 80 – 1000 MHz, 500 W CW	1
Model 125S1G6C-R-N-R-N-NE-SPF, Amplifier, 1 – 6 GHz, 125 W CW	1
Model DC6180A, Dual Directional Coupler, 80 – 1000 MHz, 600 W CW	1
Model DC7205A, Dual Directional Coupler, 0.7 – 6 GHz, 250 W CW	1
Model SCP2000M2, System Switch Control	1
Model MP09000M1, Field Probe Package	1
Model PS2000B, Probe Stand	1
Spectrum Analyzer, minimum frequency range 80 MHz to 6 GHz*	1
Signal Generator, minimum frequency range 80 MHz to 6 GHz*	4
Model ATR80M6G, Radiant Arrow Antenna, 80 MHz – 6 GHz, 5000 W CW	1
Model ATT700M12G, 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	2
Model CC41111020, Low Loss Coaxial cable, N male connectors, 2 m	2
Model CC41111050, Low Loss Coaxial cable, N male connectors, 5 m	2
Rack Enclosure on wheels, 40U or equivalent	1
2-way combiner, DC – 6 GHz	3
Model emcware® 6.0 Radiated Susceptibility, Conducted Immunity, and Emissions Test Software	1
emcware®, 1-year support contract**	1

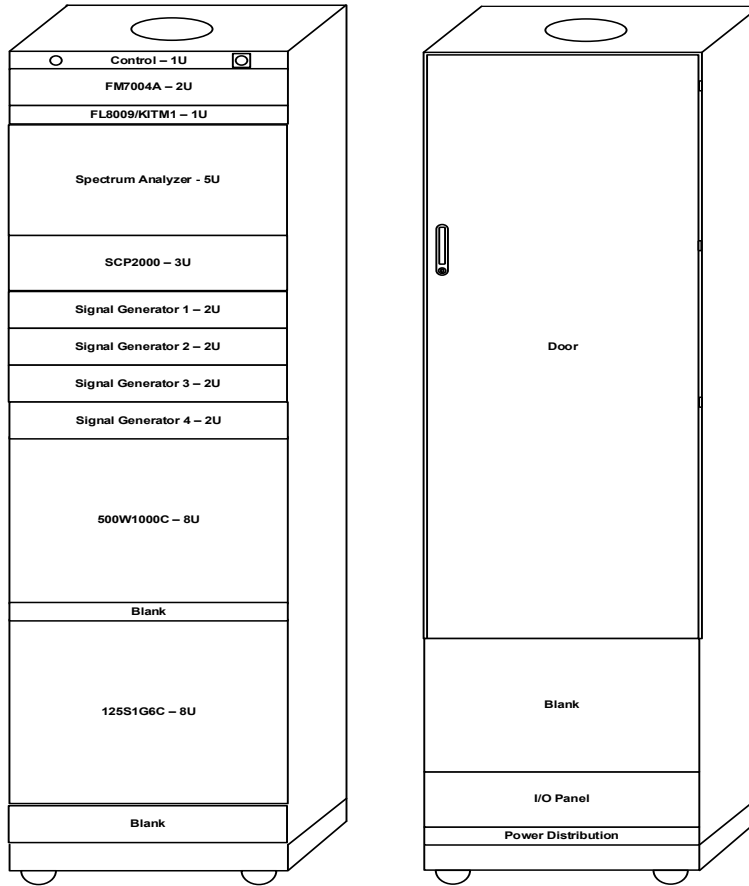
*ISO17025 calibration available at cost



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MT4IEC10V3 Control Rack



Front

Rear

Control Rack Specifications		Units
Size (H x W x D)	196 x 58 x 94	cm
	77 x 23 x 37	in
Weight	145	kg
	320	lb
Power Input	240 VAC, 1-phase, 30 A	

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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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