AR System

Model SSISOC50V80M18G

- 80 MHz – 18 GHz
- 50 V/m at 1 Meter Test Distance

Features:

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

Application Standards:

- ISO 11452-2 Component Testing

The SSISOC50V80M18G System is designed to generate up to 50 V/m CW at a 1m test distance for ISO 11452-2 full-vehicle testing from 80 MHz-18 GHz. The signal generation, control, and power monitoring equipment shall be mounted in a ventilated equipment rack along with the RF amplifiers.

The SSISOC50V80M18G 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

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

Model SSISOC50V80M18G
- 80 MHz - 18 GHz
- 50 V/m at 1 meter

Model SSISOC50V80M18G System Summary Requirements

Parameter	Description
System Frequency Range	80 MHz – 18 GHz
CW Field Strength	50 V/m
Test Distance	1 meter
Amplifier Configuration	Three (3) RF amplifiers were chosen for this test system: Model 250W1000C: 80 – 1000 MHz, 250 W Model 75S1G6C: 1 – 6 GHz, 75 W Model 40S6G18-L: 6 – 18 GHz, 40 W
Antenna Configuration	Dedicated antennas for each amp to provide optimal field generation: Model ATR80M6G, Log-periodic Antenna, 80 MHz – 6 GHz Model DRH-118, Horn Antenna, 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	3A001
Assumptions: 3 dB power margin on amplifiers to accommodate reasonable chamber and system losses. Field Strength calculations are based on free-space conditions.	

Model SSISOC50V80M18G

- 80 MHz - 18 GHz
- 50 V/m at 1 meter

Model SSISOC50V80M18G Equipment List

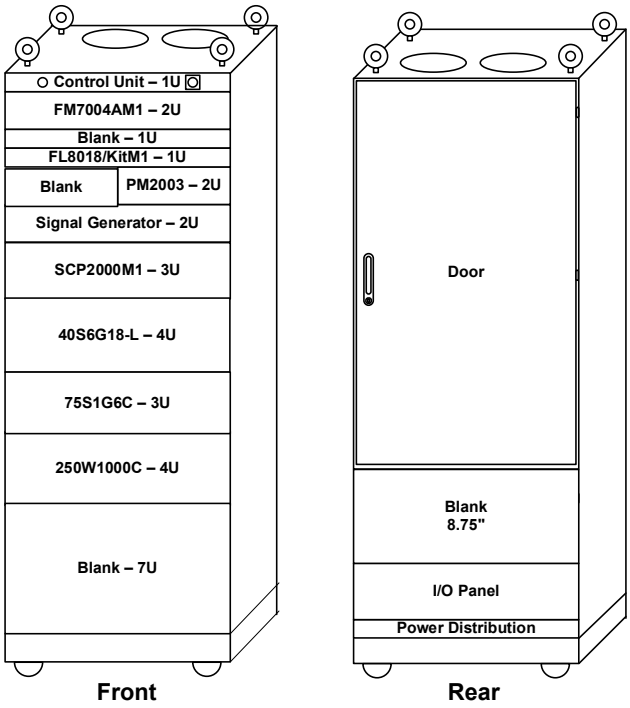
Component	Quantity
Model 250W1000C-R-N-R-N-NE, RF Amplifier, 80 MHz – 1 GHz, 250 W CW	1
Model 75S1G6C-R-N-R-N-NE, RF Amplifier, 1 – 6 GHz, 75 W CW	1
Model 40S6G18-L-R-N-R-N-NE-U, RF Amplifier, 6 – 18 GHz, 40 W CW	1
Model DC6180A, Dual Directional Coupler, 80 MHz – 1 GHz, 600 W	1
Model DC7205A, Dual Directional Coupler, 0.7 – 6 GHz, 250 W	1
Model DC7435A, Dual Directional Coupler, 4 – 18 GHz, 200 W	1
Model ATR80M6G, Log-periodic Antenna, 80 MHz – 6 GHz, 2000 W CW	1
Model DRH-118, Horn Antenna, 1–18 GHz	1
Model TP1000BM4, Non-metallic Tripod	1
Model SCP2000M1, System Controller, DC – 18 GHz	1
Signal Generator, 9 kHz – 20 GHz (Keysight N5173B-520 with options -1EM, -UNT, -UNW, -1E1, -UK6, -1CM110A)	1
Model PM2003, Power Meter, 3 channels	1
Model PH2005, Power Head, 500 kHz – 18 GHz, -70 to +20dBm	2
Model FM7004AM1, Field Monitor	1
Model FL8018/KitM1, Field Probe, 2 MHz – 18 GHz, 2-1000 V/m	1
Model PS2000B, Probe Stand, Non-Conductive	1
Model CC11111020, Coaxial Cable, DC – 18 GHz, N connectors, 2 m long	2
Model CC11111050, Coaxial Cable, DC – 18 GHz, N connectors, 5 m long	2
All internal Interconnect cables between system components	1
Test System Control PC	1
Model emcware®, Radiated Susceptibility, Conducted Immunity, and Emissions Test Software*	1
emcware®, 1-year support contract*	1

*Model emcware® and service contract to be quoted as separate line items and are therefore not included in the price of the system.

Model SSISOC50V80M18G

- 80 MHz - 18 GHz
- 50 V/m at 1 meter

SSISOC50V80M18G Racks



Control Rack Specifications		Units
Size (H x W x D)	152.4 x 56.0 x 97.5	cm
	60.0 x 22.1 x 38.4	in
Weight	109	kg
	240	lb
Power Input	240 VAC, 1-phase, 30 A	