



**Model AS18027
AR System
1-18GHz**

The AS18027 AR System has been specially designed to perform radiated susceptibility testing for MIL STD 461. The system will produce fields up to 50V/m @ 1m test distance from 1-18GHz. The system consists of the AR RF/Microwave Instrumentation equipment listed below. Please refer to individual product specification sheets for details.

SW1007 EMC test software is provided and preloaded on either a desktop or laptop PC. This software controls the supplied equipment and allows for complete automation of the radiated susceptibility test.

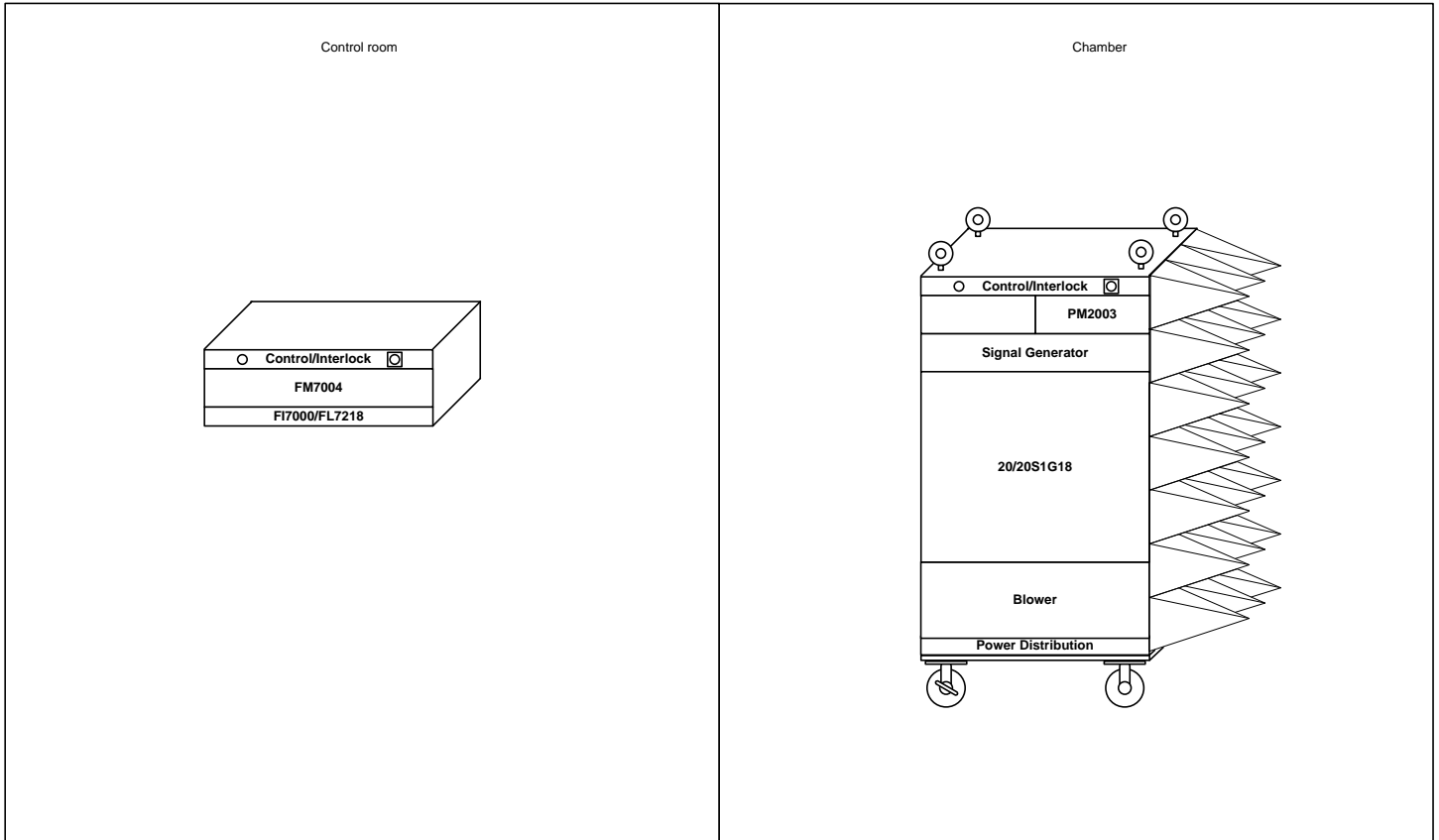
Safety interlock capability has been integrated into the system allowing a single switch (door closure) to be monitored and disable all RF generation inside the chamber. The interlock is fiber optically isolated between the control room and the chamber.

The signal generation, amplifiers and control equipment are kept inside the chamber, minimizing cable loss. This equipment is housed in a ventilated, EMI shielded equipment rack. Input power is filtered and distributed internally. A fiber-optically isolated GPIB interface is also provided. RF connections will be through bulkhead connectors located on the side or top of the rack near the rear. Frequency matched and dedicated antennas are provided along with their associated cabling. The equipment rack is equipped with oversize casters to facilitate movement into, out of, and around the chamber negotiating ramps and thresholds, as necessary. The side of the equipment rack facing the antennas is covered in RF absorber to minimize reflection.

The Field Monitor and System Interlock control, both fiber optically isolated, are mounted in a desktop cabinet 4U (7") high to be kept in the control room.

ModelAS18027 Equipment list:	Quantity
Model 20/20S1G18, RF Amplifier, 0.8-18GHz, 20Watts	1
Model DC7154AM1, Dual Directional Coupler, 0.8-4.2 GHz, 700 Watts	1
Model DC7435A, Dual Directional Coupler, 4.2-18GHz, 50 Watts	1
Signal Generator, 100 kHz-20 GHz, Agilent N5183A-520 or equivalent	1
Model PM2003, Power Meter, 3 channel	1
Model PH2004, Power Head, 100 kHz-18 GHz, -60 to +20dBm	2
Model ATH800M5GA, High Gain Horn Antenna, 800 MHz-5 GHz	1
High Gain Horn Antenna with antenna mounting adapter, 2-18GHz, Qpar Model WBH2-18HN/S or equivalent	1
Model TP1000BM1, Non-metallic Tripod for positioning the antennas	2
Antenna Adapter for mating antennas to tripods (10006774)	1
Model FM7004M3, Field monitor, 4 Channel, mounted in 4U(7") Desktop Case	1
Model FL7218/KitM1Laser Powered Field Probe, 2MHz-18GHz, 2-1000V/m	1
Model SI1000, System Interlock, Fiber/Optic and Wired	2
Model FT2000, Bulkhead Feed-Through Set, Fiber/Optic SMA	1
Model FC2010, Fiber/Optic Cable Set, 10m	2
Model CC11111030, Coaxial Cable, DC-18GHz, N male, N male, 3 meter long	2
Amplifier Rack, 20U(35") panel height, Shielded, ventilated (blower), includes power distribution and internal cabling	1
Model SW1007 EMC Test Software (Includes GPIB hardware)	1
Desktop or laptop PC, preloaded with SW1007 software	1
Color printer	1

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Amplifier Rack Specifications:

Size (H x W x D).....108.7 x 56.1 x 82.3 cm (42.8 x 22.1 x 32.4 in)

Weight.....79.5 kg (175 lbs)

Power Input.....240VAC, 30A