



**Model AS18012, M1  
AR System  
800MHz–18GHz**

The AS18012 AR System has been specially designed to house, in two, air-conditioned, EMI shielded equipment racks, the AR field generation equipment listed below. An additional control room rack cabinet of desk configuration is provided to house the field measurement and antenna height control equipment. This configuration provides a convenient tabletop location for the control PC, monitor, hardware, mouse, and printer.

Please refer to individual product specification sheets for details. Input power will be filtered and distributed internally. A fiber-optically isolated GPIB interface is also provided. RF connections will be through bulkhead connectors located in the top of the racks. The frequency matched and dedicated (1 per amplifier) antennas will be mounted and cabled to the antenna mast and be user adjustable for both horizontal and vertical polarization.

The SC1000M3 system controller allows manual and remote signal routing of RF signals both to and from up to four amplifiers, including feedback from dual directional couplers.

The equipment racks and antenna mast will be mounted on a rolling skid creating a portable field generation platform with a minimum of 60ft of control cable for maneuverability. The side of the equipment rack facing the antennas will be covered in RF absorber to minimize reflection.

Model AS18012 Equipment list:

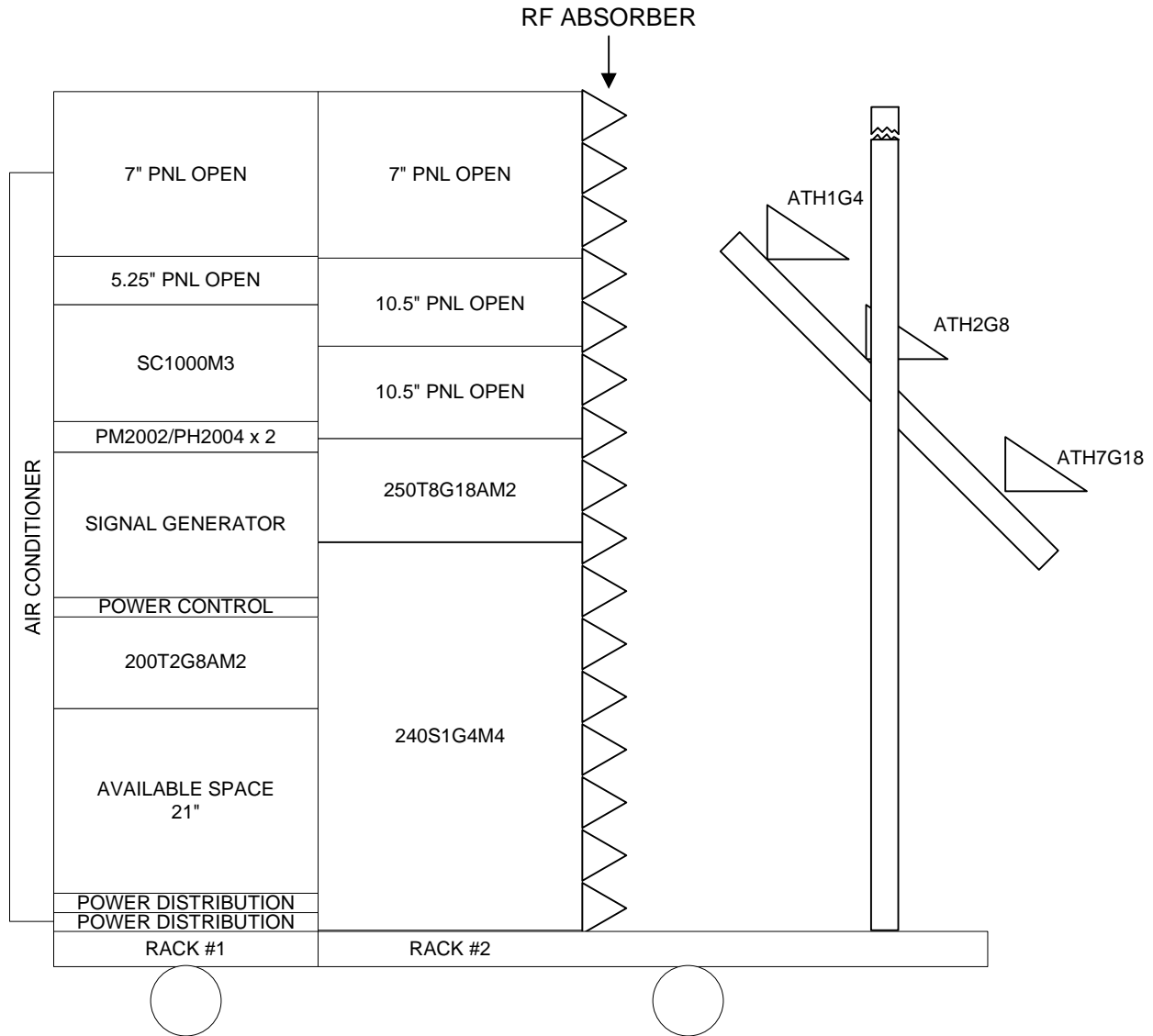
- Model 240S1G4M4, 0.8–4 GHz, 240 watts CW (Rack 2)
- Model 200T2G8AM2, 2.5–7.5 GHz, 200 watts CW (Rack 1)
- Model 250T8G18AM2, 7.5–18 GHz, 250 watts CW (Rack 2)
- Model SC1000M3, System Controller, DC–18 GHz (Rack 1)
- Model PM2002 2-channel Power Meter
- 2 Model PH2004 Power Heads, 100kHz–18GHz
- Model FM7004M1, Field Monitor (Control room desk)
- 2 Model FL7018/Kit, 3MHz–18GHz, 1–1000 V/m
- Signal Generator, 250kHz–20GHz, rear panel connectors
- Model DC7154AM1 Dual Directional Coupler, 0.8–4.2 GHz, 700 Watt (Rack 2)
- Model DC7280A Dual Directional Coupler, 2–8 GHz, 350 Watt (Rack 1)
- Model DC7450M1 Dual Directional Coupler, 7.5–18 GHz, 3000 Watt (Rack 2)
- Model ATH1G4 High Gain Horn Antenna, 1–4.2 GHz, 1500 Watts
- Model ATH2G8 High Gain Horn Antenna, 2.5–7.5 GHz, 2800 Watts
- Model ATH7G18 High Gain Horn Antenna, 7.5–18 GHz, 2800 Watts
- All internal Interconnect cables between system components
- 21 in (53.34 cm) rack space available for user installed equipment (Rack 1)
- Emco Model 2090 Antenna Controller (Control room desk)
- Emco Model 2070 Antenna Tower
- Desktop PC, preloaded with SW1007 software
- Laptop PC, preloaded with SW1007 software (M1 only)
- Color laser printer

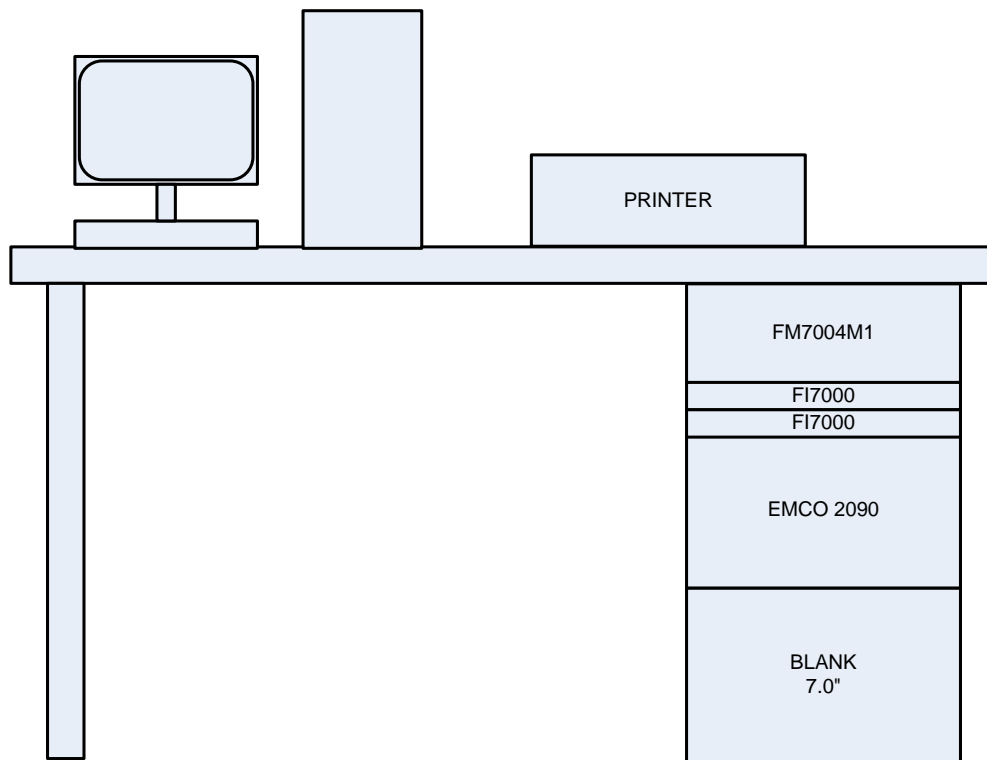
**EMI/RFI Shielded, Air Conditioned, Rack Specifications:**  
**Rack 1** **Rack 2**

Size (H x W x D)	75.82 x 22.06 x 36.40 in (192.5 x 56.03 x 92.46 cm)	75.82 x 22.06 x 36.40 in (192.5 x 56.03 x 92.46 cm)
Total Weight	395 lbs (179.5 kg)	931 lbs (423.2 kg)
Power Input	120/208 VAC , 50/60Hz, 3 phase, 60A 240 VAC, 50/60Hz, 1 phase, 60A	

NOTE: Amplifiers can be disconnected from the system controller (SC1000M3) and used independently and simultaneously.

**MODEL AS18012**





STANDARD CONFIGURATION SHOWN; M1 SUPPLIED WITH LAPTOP PC

**Control Room Desk Specifications**

Size (H x W x D) .....75.5 x 126.8 x 82.3 cm (29.74 x 49.94 x 32.4 in)  
 Weight .....40.9 kg (90 lbs)