



Man Portable System

For the AN/PRC-148 Multiband Inter/Intra Team Radios



- Contiguous 30-512 MHz Coverage
- 20 W RF Output
- Battery Operated (Single or Dual Battery Configurations)
- Environmentally Rugged
- Integrated Tunable Harmonic Filters
- Reconfigurable Manpack
- Supports the Following Waveforms/Modes Dependent Upon Radio Installed (Implemented and Planned)
 - AM/FM
 - HAVEQUICK I/II
 - MIL-STD-188-241-1/-2 (SINGARS)
 - MIL-STD-188-181B (56 kbps)
 - MIL-STD-188-181C, -182B, -183B (SATCOM IW)
 - ANDVT (LPC-10, MELP Vocoders)
 - Project 25
 - Over The Air Cloning (OTAC)

Supports and Maintains All Functionality of All Configurations of the AN/PRC-148 Radio, Including MBITR and JTRS Enhanced MBITR (JEM)



Man Portable System

For the AN/PRC-148 Multiband Inter/Intra Team Radios

MA7035



The Man Portable System is a compact, rugged amplification system which expands the capabilities of the AN/PRC-148 family of radios and secures a reliable communications link over greater distances. Providing 20 Watts of RF power amplification across the full 30-512 MHz frequency band, the Man Portable System opens up a broad range of secure and anti-jamming voice and data applications. Direct radio control of the amplifier enables full frequency-hopping capabilities. The rucksack that houses the system is reconfigurable into three modes: backpack, shoulder strap, and handle strap. In addition to the system components, the Man Portable System has capacity to store additional batteries, antennas, and other accessories. **On-the-Move Portable Solution for the Warfighter.**

TECHNICAL SPECIFICATIONS

Supports the capabilities of the installed radio

Frequency Range

- 30-512 MHz contiguous
- 5 and 6.25 kHz step size

Transmit Output Power

- 20 Watts FM
- 20 Watts PEP AM
- 20 Watts PSK

Input Voltage (Battery)

- 20-32 VDC

COMSEC

Dependent on type of radio installed

Reliability

(without radio installed)

- MTBF: \geq 8,000 hours
- MTTR: \leq 15 minutes

Transmitter Characteristics

- Non-Harmonic Spurs: -45 dBc max
- Harmonic Spurs: -56 dBc typical

Receiver Characteristics

Dependent on type of radio installed

- Typical -117 dBm FM receive sensitivity

Physical Parameters

- Height: 14.0 inches (35.6 cm)
- Width: 12.0 inches (30.5 cm)
- Depth: 8.0 inches (20.3 cm)
- Weight: < 16.0 pounds (7.25 kg)

Finish

- Matte Black, Non-Reflective

EMI Compliance

- EMI/EMC: MIL-STD-461C

Battery Compatibility

- Rechargeable: 2590-Li Ion
- Non-rechargeable: 5390, 5590

Battery Life

With 80:10:10 duty cycle (STBY:RX:TX)

- 8 hours with two 5590 or 5390 batteries
- 5 hours with one 2590 battery

Environmental Specifications

- Temperature
 - Operating: -31° to +60° C
 - Storage: -33° to +71° C
- Humidity: 95% Non-condensing
- Altitude: 30,000 Feet
- Shock/Stability/Vibration: ANSI/TIA/EIA-603

Includes

- 30-512 MHz 20 Watt RF Power Amplifier
- Battery Eliminator
- Battery Boxes
- Batteries
- Carrying Case
- 20 Watt-Capable 90-512 MHz Broadband Antenna
- 20 Watt-Capable 30-90 MHz Blade Antenna
- Associated Cabling

Complete AN/PRC-148 System Elements:

- Dismounted/Fixed Site:
 - 5 Watt Multiband Inter/Intra Team Radios (AN/PRC-148 JEM, AN/PRC-148 MBITR, and PRC6809 MBITR)
 - 20 Watt Man Portable System
 - 20 Watt and 50 Watt Base Stations
 - 20 Watt Tactical Repeater
- Vehicular:
 - 20 Watt and 50 Watt Vehicle Adapters
 - 20 Watt AN/VRC-111 Vehicle Adapter Amplifier
 - 50 Watt AN/VRC-111 Vehicle Adapter Amplifier – Dual Channel
 - 50 Watt Vehicle Adapter Amplifier – Single Channel
 - 50 Watt Low Profile Vehicle Adapter
 - 50 Watt AN/VRC-113 Cradle Vehicle Adapter

- Non-U.S. Government sales are subject to U.S. Government approval.
- Specifications are subject to change without notice.

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