



## MBITR Man Portable System

For the Multiband Inter/Intra Team Radio (MBITR) System



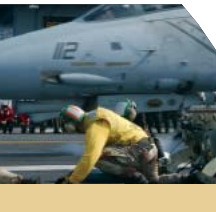
- Coverage Across the Full 30-512 MHz Frequency Range
- 20 Watt RF Output
- Battery Operated (Single or Dual Battery Configurations)
- Environmentally Rugged
- Supports SINCGARS and HAVEQUICK I/II Frequency Hopping, and ANDVT (PSK), AM and FM
- Integrated Tunable Harmonic Filters
- Configurable as either Type I CCI or Type III
- Reconfigurable Manpack

**Seamless, Risk-Free Upgrade to the JTRS-Enhanced MBITR (JEM) Configuration**



# MBITR Man Portable System

MA7035



The Man Portable System is a compact, rugged amplification system for the combat-proven AN/PRC-148 Multiband Inter/Intra Team Radio (MBITR). It expands the capabilities of the handheld radio and secures a reliable communications link over greater distances. Providing 20 Watts of RF power amplification across the full 30-512 MHz frequency band of the MBITR set, 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 manpack (bag) that houses the system is reconfigurable with three optional modes: backpack, shoulder strap, and handle strap. In addition to the system components, the manpack has capacity to store additional MBITR batteries and an extra system antenna. **On-the-Move Portable Solution for the Warfighter.**

## TECHNICAL SPECIFICATIONS

### Frequency Range

- 30-512 MHz Contiguous
- 5 & 6.25 kHz Step Size

### Transmit Output Power

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

### Input Supplied (Battery)

- 20-28 VDC

### COMSEC

- Equivalent to installed radio

### Reliability, including an MBITR

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

### Transmitter Characteristics

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

### Receiver Characteristics

- Conforms to the performance requirements of the properly installed radio—Sensitivity Degraded  $\leq 2$  dB

### 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-Li Ion, 5590-Li Ion

### Modes of Operation (Dependent on type of radio installed)

- FM
  - Non-secure voice; Non-secure narrowband voice
  - 12 & 16 kbps secure voice
  - 12 & 16 kbps secure synchronous data
  - Secure asynchronous data to 4800 bps
- AM
  - Non-secure voice
  - Secure 12 & 16 kbps voice
  - Secure 12 & 16 kbps synchronous data
  - Secure asynchronous data to 4800 bps
- SINCGARS
  - Secure & non-secure single channel voice
  - Secure & non-secure frequency hopping voice
  - Secure single channel and frequency hopping data (600, 1200, 1200N, 2400, 2400N, 4800, 4800N, 9600N, 16000, RS-232)
- HAVEQUICK I & II
  - Secure & non-secure single channel voice
  - Secure & non-secure frequency hopping voice
- ANDVT
  - Secure narrowband voice
  - Secure 2400 bps synchronous data

### Environmental Specifications

- Temperature
  - Operating:  $-31^{\circ}$  to  $+60^{\circ}$  C
  - Storage:  $-33^{\circ}$  to  $+71^{\circ}$  C
- Humidity: 95% Non-condensing
- Altitude: 30,000 Feet
- Shock/Stability/Vibration: MIL-STD-810E

### Interoperability (Dependent on type of radio installed)

- AN/PRC-77, AN/VRC-12 Series, AN/PRC-68, AN/PRC-119A/B, AN/PRC-117A-F, AN/PRC-113, AN/PRC-139, AN/PSC-5C/D
- Motorola MX-300, MX-300S, MX-300R, MX-350, SABER family of radios, & more

### Includes

- MBITR Receiver/Transmitter (procured separately)
- 30-512 MHz 20 Watt RF Power Amplifier
- Battery Eliminator
- Battery Box(es)
- Batteries
- Carrying Case
- High Power 20 Watt-Capable 90-512 MHz Broadband Antenna
- High Power 20 Watt-Capable 30-90 MHz Blade Antenna
- Associated Cabling

### Available MBITR System Components

- Vehicle Adapter
- AN/VRC-111 Vehicle Adapter Amplifier
- Tactical Repeater
- Base Station

➤ Non-U.S. Government sales may be subject to U.S. Government approval and may require Government - to - Government agreements.  
 ➤ Specifications are subject to change without notice.

### Thales Communications, Inc.

Land &amp; Joint Systems

22605 Gateway Center Drive

Clarksburg, MD 20871

Toll-Free: 1.800.258.4420 | Phone: 240.864.7000 | Fax: 240.864.7920

E-mail: TCI@thalescomminc.com | Website: www.thalescomminc.com

