

- Contiguous 30-512 MHz Coverage
- 50 Watts RF Output 30-88 MHz
- 20 Watts RF Output 89-512 MHz
- Integrated Harmonic Filters
- Programmable Cosite Filtering
- Low Profile for Space Constrained Installation
- Environmentally Rugged - Meets MIL-STD-810
- Full Function Radio Operations from Front Panel
- Cable-free Radio Dismount Capability in Less Than 2 Seconds



AN/VRC-113 50 Watt Cradle Vehicle Adapter

FOR THE AN/PRC-148 MULTIBAND INTER/INTRA TEAM RADIOS





AN/VRC-113 50 Watt Cradle Vehicle Adapter

FOR THE AN/PRC-148 MULTIBAND INTER/INTRA TEAM RADIOS

The compact, rugged Cradle Vehicle Adapter (CVA) for the combat-proven AN/PRC-148 family of multiband inter/intra team radios provides 50 Watts of RF power amplification from 30-88 MHz and 20 Watts of RF power amplification from 89-512 MHz. The CVA provides extended range for the most advanced handheld radio in operation. Having a low profile weighing 16 pounds with the radio installed, the CVA can be easily integrated into air, land, and sea-based platforms. The CVA chassis provides interfaces for power sources, antennas, intercoms, and data devices. The front panel of the radio provides full function operations. The internal battery charger recharges the radio's Lithium-Ion battery. Users can dismount the radio from the CVA within two seconds - cable free, fully charged, and immediately operational.

TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS

Supports the capabilities of the installed radio

Frequency Range

- > 30–512 MHz contiguous

Power Input

- > 20 to 32 VDC
- > Maximum Input Power 240 Watts

Installations

- > SINCGARS MT-6352 Mounting Tray
- > Stand-alone Vehicle Installations
- > Separate Cradle Allows for Separation from Power Amplifier

Weight

- > Power Amplifier: 8 lbs
- > Cradle (without radio): 3 lbs

Radio Unit

- > All variants of the AN/PRC-148 (MBITR and JEM) and PRC6809 MBITR

Electrical Interfaces

- > AN/VIC-1, AN/VIC-3, LS-671, MT-6352 Power, RS-232 Data

Mechanical Interfaces

- > MT-6352, MT-6352A (optional adapter tray required)

Supports the Following Waveforms/Modes (Dependent Upon Installed Radio)

- > AM/FM
- > HAVEQUICK I/II
- > MIL-STD-188-241-1/-2 (SINCGARS)
- > MIL-STD-188-181B (56kbps)
- > MIL-STD-188-181C, -182B, -183B (SATCOM IW)
- > ANDVT (LPC-10, MELP Vocoders)
- > Project 25
- > Over The Air Cloning (OTAC)
- > Retransmission

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

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature

- > - 30°C to +60°C

Altitude

- > 30,000 ft, MIL STD-810F

Storage Temperature

- > - 33°C to +70°C

Sand/Dust

- > MIL-STD-810F

Shock/Vibration

- > MIL-STD-810F

Salt Fog

- > MIL-STD-810F

Blowing Rain

- > MIL-STD-810F

Humidity

- > MIL-STD-810F

RF SPECIFICATIONS

RF Interface

- > 50 Ohms

FM Receive Sensitivity

- > -116 dBm Typical

Output RF Power

- > 50 Watts from 30 to 88 MHz
- > 20 Watts from 89 to 512 MHz

Duty Cycle

- > 100% operation at 60°C
- > Supports Continuous Operation For Typical Use

EMI Compliance

- > EMI/EMC: MIL-STD-461E

TEMPEST Compliance

- > NSTISSAM TEMPEST/1-92, Level II
- > NACSEM 5112

GENERAL INFORMATION

ACCESSORIES

A complete line of accessories to support the installed radios

SYSTEM COMPONENTS

AN/PRC-148 Family of Radio Equipment:

- > 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
 - > Modular Universal Battery Charger
- > 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
 - > 50 Watt SATCOM Low Profile Vehicle Adapter
 - > Mounted Soldier Cordless Communications System