



AN/VRC-111 20 Watt Vehicle Adapter Amplifier

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



- Full Configuration: Consists of Two AN/PRC-148 Radios, Two Vehicle Adapters, and Interface Tray (also available without AN/PRC-148 radios)
- Contiguous 30-512 MHz Coverage
- 20 W RF Output (50 W version also available)
- Installs onto Existing MT-6352 Mounting Tray
- Powered Through Existing SINCGARS Mounting Tray
- Compatible with Existing SINCGARS Vehicle Antennas (Provided Separately)
- No Additional RF or Power Cable Installation Required

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



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



The AN/VRC-111 20 Watt Vehicle Adapter Amplifier (VAA) is a COTS/NDI, electrical and mechanical fixture combining the functionality of the battle-proven AN/PRC-148 Multiband Inter/Intra Team Radio (all MBITR and JEM configurations) and Vehicle Adapter into a system that offers an alternative to existing SINGGARS vehicular installations. The AN/VRC-111 20 Watt VAA consists of two AN/PRC-148 radios, two Vehicle Adapters, and an electrical/mechanical interface tray that facilitates direct installation into military vehicles outfitted with SINGGARS Installation Kits (IKs) utilizing Mounting Base MT-6352. The 20 Watt VAA, when installed in combination with a SINGGARS IK, enables power amplified (20 Watt per Vehicle Adapter), co-site filtered, SINGGARS performance as well as operation with the SINGGARS IKs audio devices and vehicular intercom systems such as the VIC-3. Rapid, cable-free radio dismount in less than 2 seconds is enabled with single push-button action. Capability beyond basic SINGGARS functionality is available through replacement of the standard antenna provided in the SINGGARS IK with a readily available COTS, 30-512 MHz broadband antenna. The VAA is rugged, constructed to withstand harsh weather conditions and ballistic shock. **A common solution for vehicular and dismounted communications.**

GENERAL SPECIFICATIONS

Supports the capabilities of the installed radios

Frequency Range

- 30-512 MHz contiguous

Power Input

- 12 to 32 VDC

Installations

- Adheres to the AN/VRC-91 footprint

Weight

- 38 lbs

Radio Unit

- All variants of the AN/PRC-148 (MBITR and JEM) and PRC-6809 MBITR

Electrical Interfaces

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

Mechanical Interfaces

- MT-6352, MT-6352A

RF SPECIFICATIONS

RF Interface

- 50 Ohms

FM Receive Sensitivity

- -113 dBm @ 12 dB SINAD (-115 dBm typical)

Receive Spurious

- > 50 dB

Output RF Power

- FM 5 and 20 Watts
- PSK 5 and 20 Watts
- AM 20 Watts

Harmonic Suppression

- > 45 dBc

Spurious Suppression

- > 56 dBc

Transmit Duty Cycle

- 50:50 transmit at 20 Watts

Co-site

- > 35 dB attenuation at 15% frequency separation

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature

- -31°C to +60°C

Salt Fog

- MIL-STD-810F

Shock/Vibration

- MIL-STD-810F

Altitude

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

Sand/Dust

- MIL-STD-810F

Blowing Rain

- MIL-STD-810F

Humidity

- MIL-STD-810F

ACCESSORIES

A complete line of accessories to support the installed radios and Vehicle Adapters

SYSTEM COMPONENTS

Other AN/PRC-148 System Components

- Vehicle Adapter (20 W and 50 W versions)
- Tactical Repeater
- Base Station (20 W and 50 W versions)
- Man Portable System
- AN/VRC-111 50 W Vehicle Adapter Amplifier

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

Thales Communications, Inc.

22605 Gateway Center Drive | Clarksburg, MD 20871
Toll-Free: 1.800.258.4420 | Phone: 240.864.7000 | Fax: 240.864.7920
E-mail: Solutions@thalescomminc.com | Website: www.thalescomminc.com

