

# 50 Watt Base Station for the AN/PRC-148 JEM and PRC6809 Radios



# 50 Watt Base Station

The 50 Watt Base Station provides fixed-site configuration for the AN/PRC-148 JEM and PRC6809 handheld radios. The Base Station provides 50 Watts of RF power amplification from 30 to 87.975 MHz frequency band while allowing for a wide range of AC and DC input power sources. Packaged in a rugged, easily transportable transit case, the compact Base Station leverages Thales' handheld



radio and vehicular products to provide a low-risk, high-performance solution for command post and base operations communications requirements. With a common human machine interface, users familiar with the AN/PRC-148 JEM or the PRC6809 radios can immediately operate the 50 Watt Base Station. This commonality also translates into a simpler sustainment concept and faster repair times because fewer elements need to be stocked for field or depot repair. This results in lower life cycle costs to support the Base Station.

## **Technical Specifications**

### **Key Features**

- ➤ Contiguous 30-512 MHz Coverage
  - 50 Watt RF Output from 30–87.975 MHz
  - •20 Watt Output from 88-512 MHz
- ➤ Integrated Tunable Harmonic Filters
- ➤ Environmentally Rugged
- Removable Control Head for Full Function Remote Operations
- Cable-free Radio Dismount Capability in Less Than 2 Seconds

### **Physical Parameters**

(with control head and radio with battery)

**Length:** 15.57 inches (39.54 cm)

**Width:** 13.19 inches (33.50 cm)

**Height:** 8.38 inches (21.28 cm)

**Weight:** 50 pounds (22.7 kg) (radio, amplifier, power supply and cables)

### **Environmental Specifications**

Operating Temperature: -20° to +55° C

Storage Temperature: -30 $^{\circ}$  to +70 $^{\circ}$  C

Humidity: 95% Non-condensing

Rain, Shock/Vibration, Sand and Dust,

Salt Fog: MIL-STD-810G\*

**Altitude:** 15,000 feet, MIL-STD-810G\*

Drop: 1/2 meter\*

### **Power Input**

Supports 12V and 28V input DC sources 90–132 VAC or 180–264 VAC

### **RF Specifications**

RF Interface: 50 Ohms

FM Receive Sensitivity: -118 typical at 30–87.975 MHz; -121 typical at 88–512 MHz

Receive Spurious: > 58 dB

Harmonic Suppression: > 55 dBc

Output RF Power: 50 watts from 30 to 87.975 MHz; 20 watts from 88 to 512 MHz

**Transmit Duty Cycle:** 100% 50 watt transmit

at 60° C (1 Hour)

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

### **Electrical Interfaces**

AN/VIC-1, AN/VIC-3, LS-671, RS-232 data

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Installations

Stand-alone dual power amplifier



<sup>\*</sup> Indicates requirements met inside the transit case. Specifications are subject to change without notice.