

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

Power Boosting Amplification
for Fixed Applications



20 Watt Base Station

The power-boosting Base Station provides a fixed site configuration for the AN/PRC-148 JEM and PRC6809 handheld radios. The Base Station provides 20 Watts of RF power amplification across the full 30–512 MHz frequency band while allowing for a wide range of AC and DC input power sources. Packaged in a rugged, easily transportable transit case weighing less than 60 pounds, 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 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
- 20 Watt RF Output
- Integrated Tunable Harmonic Filters
- Integrated Tunable Co-site 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)

Height: 8.3 inches (21 cm)

Width: 8.4 inches (21.3 cm)

Depth: 14.8 inches (37.6 cm)

Weight: 28.0 pounds (12.7 kg) (radio, amplifier, power supply), 57.5 pounds (26.1 kg) (equipment in transit case)

Environmental Specifications

Temperature

Operating: 0° to +55° C

Storage: -31° to +60° C

Humidity: 95% Non-condensing

Rain, Shock/Vibration, Sand and Dust, Salt Fog: MIL-STD-810G*

Altitude: 30,000 feet, MIL-STD-810G*

Drop: ½ meter*

Reliability

(without radio installed)

MTBF: > 4,00 hours

MTTR: < 30 minutes

COMSEC

Dependent on type of radio installed

Transmit Output Power

5 and 20 watts FM

20 watts PEP AM

5 and 20 watts PSK

Input Supply

12.5–32 VDC

90–132 VAC or 180–264 VAC @ 47–63 Hz single phase

Transmitter Characteristics

Spurious Output

Harmonics: > 45 dBc

Other spurious: > 56 dBc

FM hum and noise degraded < 1 dB

AM hum and noise degraded < 6 dB

Co-site Characteristics

6 foot minimum antenna spacing at 15% frequency separation

Receive Sensitivity (Digital/Analog)

Dependent on type of radio installed

Typical -115 dBm FM

EMI Compliance

EMI/EMC: MIL-STD-461 C

TEMPEST Compliance

NSTISSAM TEMPEST/1–92, Level II

NACSEM 5112

*Indicates requirements met inside the transit case. Specifications are subject to change without notice.

Thales Defense & Security, Inc.

22605 Gateway Center Drive | Clarksburg, MD 20871
TF+1.800.914.0303 | P: +1.240.864.7643
solutions@thalesdsi.com | www.thalesdsi.com



2104:062020:V12

Thales has a policy of continuous development and improvement and consequently the equipment may vary from the description and specification in this document. This document may not be considered as a contract specification. Graphics do not indicate use or endorsement of the featured equipment or service. Copyright © 2020 Thales