

AN/PRC-148E Spear Single Channel Handheld Radio

Small Form
Factor Tactical
Communications



Spear

The AN/PRC-148E is a combat-proven handheld radio that is the smallest, lightest, tactical handheld radio covering the 30–512 MHz frequency range. The software defined radio supports a wide variety of tactical Line of Site and SATCOM waveforms providing interoperability with a full range of legacy tactical radios. The suite of waveforms available on the AN/PRC-148E is the result of over 15 years of waveform and software development and its programmable cryptography supports the requirements of the National Security Agency's (NSA) Crypto Modernization program. The AN/PRC-148E Spear features simple to use human machine interface – minimize training requirements, enables rapid fielding, and provide the reliability that warfighters have trusted for many years.



Technical Specifications

Key Features

- ▶ Smallest and Lightest, Single Channel Handheld Radio Available
- ▶ Radio over IP agnostic with small form factor MANET radios
- ▶ LTAC enabled provides commercial SATCOM capability
- ▶ Type-1 Certified Programmable Encryption Engine (AIM)
- ▶ 2M/20M Immersible
- ▶ Simple, Intuitive HMI
- ▶ 256 Programmable Presets
- ▶ Rechargeable Lithium-Ion 3.5 Ah
- ▶ Compliant with the Universal Battery Charger (UBC) Family of Tactical Chargers

Physical Parameters

Length: 8.50 inches (21.59 cm)
(with battery attached, excluding antennas)

Width: 3.2 inches (8.13 cm)

Depth: 1.15 inches (2.92 cm)

Weight: 1.24 pounds – Radio and Battery (571 g)

Environmental Specifications

Operating Temperature: -31° to +55° C

Storage Temperature: -33° to +71° C

Immersion: 2M/20M

Waveforms/Modes of Operation Dependent on Configuration of Radio

MIL-STD-188-241-1/-2
(SINCGARS – Standard/FH2 EOM)

MIL-STD-188-181C, -182B, -183B
(SATCOM IW)

LTAC L-Band SATCOM

HAVEQUICK I and II

ANDVT (LPC-10, MELP)

AM/FM

Project 25

Over-The-Air-Cloning (OTAC)

Situational Awareness

Retransmission

AM Swept Tone Beacon

Narrowband Channel

Frequency Range: 30 MHz–512 MHz

Transmit Power: 5 watt in all frequencies,
10 watt in SATCOM

Step Size: 5 kHz and 6.25 kHz

Channel Bandwidth: 5 kHz, 12.5 kHz, 25 kHz
(8.33 kHz future waveform)

Specifications are subject to change without notice.

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