

PRC2150

VHF Tactical Manpack Radio



- **30 to 88 MHz, 12.5/25 kHz Steps**
- **100 Programmable Memory Channels**
- **Rugged (MIL-STD-810), Completely Immersible**
- **Manpack/mobile/base Configurations**
- **Up to 10W (Manpack) & 75W (Mobile or Base Station)**
- **Internal Antenna Tuner**
- **Remotely Controllable**
- **Excellent Co-site Performance**
- **BITE to Module Level**
- **Voice & Data Capability**
- **Embedded ECCM, COMSEC & GPS Functions**

Datron's PRC2150 is part of the Spectre V^R series of transceivers, providing both voice and data capability over 30-88 MHz. The PRC2150 is a high performance, competitively-priced, tactical manpack radio with optional GPS capabilities. It is designed to satisfy the demanding needs of today's sophisticated tactical communications arena and is available as either a 10W manpack or a 75W mobile or fixed station system. It meets MIL-STD-810 for reliable operation in harsh environments in any configuration.

The PRC2150 addresses today's most pressing battlefield issues by incorporating a full range of embedded features. Rapid and reliable data capability, allowing both text and image files to be transmitted, lets users instantaneously update their battlefield situation. Excellent dynamic range lets co-located units transmit and receive simultaneously on the same vehicle without diminished performance. Menu screens in the language of the user offers a new level of operating comfort for the operator. Accurate position and time-of-day information is provided by the optional embedded GPS receiver.

The PRC2150 has excellent distance coverage, due to its sensitive and high dynamic range receiver, its finely-tuned internal antenna matching network, and its many variable output power settings (from 100mW to 75W). High power settings can be used when maximum range is desired, while lower power settings can be used to save battery life or when low probability of intercept is a mission requirement.

A comprehensive BITE lets users or maintenance personnel completely monitor the performance of the radio. A self-calibrating function permits automatic alignment of all circuitry in the radio on demand. Status messages are shown on the PRC2150's large graphic display. The latter is scratch and impact resistant for reliable use in tactical situations.

The PRC2150 possess all of the functionality of its companion Spectre V^R radio, the PRC2100V, except for ECCM and COMSEC. The PRC2150 is not upgradeable to contain either frequency hopping or digital encryption. It is, however, compatible with the PRC2100V in all non-hopping, non-encrypted modes.

PRC2150 SPECIFICATIONS

GENERAL

Frequency Range	30 to 88 MHz;
Channel Spacing	12.5 or 25 kHz
Preset Channels	100 Programmable memory channels – all mode information individually programmable per channel
Scanning	Any or all channels in a group (up to 100)
Channel Programming	From front panel or remotely via computer
Modes	Voice: FF FM, simplex or half-duplex Data: 100 to 56,000 bps, asynchronous input, 16 kbps output
Input Power Requirements	11 – 15 Vdc;
Battery Pack	BB-NM10 NiMH (up to 11.1AH); Lithium
Low Battery Indicator	LCD battery icon
Antenna Port	TNC for 50 ohm broadband antennas or for connection to external amplifier; whip antenna port.
Display	Backlit, multi-function custom LED

Mechanical, Environmental

Size	8.5" x 3.5" x 9.5" (216mm x 89mm x 241mm); W x H x D, including battery pack.
Weight	9.46 lbs (4.2 kg), w/o battery pack; BB-NM10 pack is 4 lbs (1.8kg).
Package	OD, sealed, including battery pack.
Temperature	-30 to +60 degrees C., operating
Shock, Vibration, Humidity, Fungus, Altitude	Per MIL-STD-810
EMI/RFI	Per relevant sections of MIL-STD-461

Transmitter

RF Power Output	100mW to 10W, (3 adjustable settings), manpack; 100mW to 75W (4 settings), mobile or base
Duty cycle	Continuous service, all modes
Harmonics	-60 dB

Receiver

Sensitivity	10 dB SINAD for 0.5uV input
Squelch	Tone or carrier; compatible with AN/PRC77, PRC1077, PRC1080.
Audio	500mW into 16 ohms; 50mW @ 150 ohms; 0 dBm into 600 ohms.

Antenna Tuning

Antennas	Whip (AT271V) and tape (AT-892); fully automatic antenna tuning;
Antenna Switching	Tuner bypassed and 50 ohm port automatically engaged when whip (or long-wire) antenna removed

Internal Features

GPS (optional)

Note: all specifications subject to change without notice



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