

PRC1088

VHF Tactical Manpack Radio



Datron's PRC1088 is a tactical VHF radio system that features both ECCM (frequency hopping) and COMSEC (encryption) for secure, anti-jam performance in the field.

The PRC1088 is a full-band (30 – 88 MHz) frequency hopping radio. The radio's ECCM algorithm is contained within the radio firmware and provides a unique hopping sequence based on the user's ECCM fill plan. When operating in the ECCM mode, the PRC1088 can evade jamming efforts by hopping over any or all of the radio's 2320 available channels.

The PRC1088's internal high-level encryption system can be programmed with COMSEC key variables that can be loaded from either a keyfill device or front panel control switches.

Datron's PRC1088 has a proven track record, having been successfully deployed around the world, providing reliable tactical VHF communications in the harshest battlefield environments.

The PRC1088 is easy to operate and maintain. It has 9 preset channels and a minimum of front panel controls. The radio's 2-level, front panel controlled BITE program assures that the radio is ready to perform when needed and rapidly isolates any faults to an easily replaceable PC-board assembly.

The PRC1088 is a very flexible radio system that can easily be used to form the basis for a tactical field network serving a variety of requirements. It is possible to operate the radio in "clear" mode, "ECCM" mode, and/or "COMSEC" modes, thus offering excellent communications solutions for both standard and covert engagements. The PRC1088 is also completely interoperable with Datron's PRC1080 portable "Squad" radio in all modes, and is compatible with existing stocks of AN/PRC77 batteries and other accessories.

For mobile operation, the VRC1088 provides a quick upgrade to existing VRC-12/46/64 installations by using the same cabling and mounts. The VRC1088 mobile configuration includes the PRC1088 radio, MT1088 vehicular mount, and the AM1088 50W RF booster amplifier.

- **30 – 88 MHz, 25 kHz channel spacing**
- **Rugged (MIL-STD-810), Completely Immersible**
- **Manpack/mobile Configurations**
- **5/50 Watts**
- **Embedded ECCM/COMSEC**
- **BITE to Module Level**
- **Multiple Battery Charging Options**
- **Rugged and Reliable**
- **Retransmission Capability**

PRC1088 SPECIFICATIONS

GENERAL	
Frequency Range	30 to 87.975 MHz;
Available Channels	2,320, in 25 k Hz steps
Preset Channels	9 fixed frequency; 9 ECCM
Scanning	Full band
Channel Programming	From front panel or remotely via computer or keyfill
Modes	Voice/data: 16 kbps
Input Power Requirements	11 – 15 Vdc;
Battery Pack	BB-LA6 sealed lead calcium; BA5598/U Lithium (case holds spare battery)
Antenna Port	Combination BNC for 50 ohm broadband antennas or for connection to external amplifier and whip antenna port.
Display	Backlit, multi-function custom LED
Mechanical, Environmental	
Size	27.3 cm x 9.6 cm x 22.5cm); W x H x D, including battery pack.
Weight	4.26 kg, w/o battery pack; BB-LA6 pack is 2 lbs (0.9kg).
Package	OD, sealed, including battery pack.
Temperature	-40 to +60 degrees C., operating
Shock, Vibration, Humidity, Fungus, Altitude	Per MIL-STD-810
Transmitter	
RF Power Output	Manpack: 2.5W (low) or 5W (high); mobile: 50W
Duty cycle	Continuous service, all modes
Modulation deviation	+/- 7 kHz, voice or data
Receiver	
Sensitivity	10 dB SINAD for 0.5uV input
Squelch	150 Hz tone
Audio output	12mW @ 1000 ohms; 0 dBm into 600 ohms.
Bit error rate	<10% @ 0.5 uV
Antenna	
Antennas	Whip (AT-892/U), 3 foot flexible tape

Note: all specifications subject to change without notice



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