



PRC-220/E

VHF Portable Radio Communication System

PRC-220/E Software Defined Handheld Radio Communication System is a tactical secure radio with capability of establishing voice/data communication in fixed/hopping frequency mode. This radio is compatible with VHF/LB analog radios in frequency band of 30-88MHz. There are three selectable power levels (Low, Medium, and High) considered in the radio so that it covers a wide transmission range. In addition, Fixed/Hopping frequency mode, Code/Plain voice and data transmission, SMS sending, Various types of analog/digital modulations, establishing selective/group/broadcast communication, Software upgrading/programming, Hailing/Plain override/Late Entry, connecting to external GPS (optional), network connection (optional), remote controlling (optional) via the RS-485/LAN/ISDN, and operator's controller unit (optional) are the other capabilities of the PRC-220/E.

General specifications

Frequency band.....	30~88 MHz
Frequency channel spacing.....	12.5/25 KHz
Frequency stability.....	±1PPm
Number of preset channels.....	100 channels
Supply.....	12-16.4 VDC battery pack Battery life time: 15h (1-1-8) for rechargeable battery Battery life time: 8h (1-1-8) for disposable battery
Data transmission rate.....	up to 9.6Kbps
Modulation type.....	FM/QPSK/CPM/FSK
Vocoder type.....	MELP/CVSD/AMBE
Voice/data operation type.....	FIX FREQUENCY (PLAIN/CIPHER) FREQUENCY HOPPING (CIPHER)
Antenna type.....	Whip, Rod

Receiving specifications

Sensitivity.....	-117dBm/12dB SINAD
Adjacent channel rejection.....	>60dB
IF rejection.....	>70dB
Image rejection.....	>70dB
Audio distortion.....	less than 5%

Transmitting specifications

Transmitter power.....	0.5W-5W-10W ±1.5dB
Harmonic rejection.....	-50dBc
Spurious signal rejection.....	-60dBc
Modulated frequency change.....	5.5±1.0 KHz

Physical & environmental specifications

Dimension (W×H×D).....	74×199×309 mm
Weight.....	less than 3.5kg (without battery)
Operating temperature.....	-25°C ~ +65°C
Storage temperature.....	-40°C ~ +65°C
Environmental standard.....	MIL-STD-810F
EMC standard.....	MIL-STD-461F