



HRC-220/E

VHF Software Defined

Handheld Radio Communication System

HRC-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. 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), and remote controlling (optional) via the RS-485/LAN/ISDN are the other capabilities of the HRC-220/E.

General specifications

Frequency band.....	30-88 MHz
Frequency channel spacing.....	12.5/25KHz
Frequency stability.....	±1 ppm
Preset channels.....	256 channels
Supply.....	13-16.4VDC battery pack Battery life time: 8h (1-1-8)
Data transmission rate.....	up to 9.6Kbps
Modulation types.....	FM/QPSK/CPM/FSK
Vocoder types.....	MELP/CVSD/AMBE
Voice/Data operating modes.....	FIX FREQUENCY (PLAIN/CIPHER) FREQUENCY HOPPING (CIPHER)
Antenna type.....	Whip

RX specifications

Receiving sensitivity.....	-117 dBm/12 dB SINAD
Adjacent channel rejection.....	>35 dB
Intermediate Frequency rejection.....	>70 dB
Image frequency rejection.....	>70 dB
Audio distortion.....	less than %5

TX specifications

Transmitter power.....	0.5W-5W ±1.5dB
Harmonic rejection.....	-50dBc
Spurious signals rejection.....	-60dBc
Deviation of the modulated frequency.....	5.5±1.0 KHz

Environmental and mechanical specifications

Operating temperature.....	-25°C ~ +65°C
Storage temperature.....	-40°C ~ +65°C
Physical dimension.....	48 × 75 × 240 mm
Weight.....	less than 1 kg (without battery)
Environmental standard.....	MIL-STD-810G
EMC standard.....	MIL-STD-461F