

SPECIFICATION

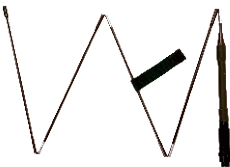
GENERAL	
Frequency Range	30-87.975MHz
Channels	2320 at 25kHz spacing
Net Preset	100 total/15 selectable from switch
RF Output Impedence	50Ω
FM Deviation	5.6kHz ±1kHz
Waveforms	CNR/VRN/PRN
Transmission Modes	FM/GMSK/CPM
COMSEC	AES 256/Customized
Vocoder	SELP
Data Rate	≤ 48kbps
Data Interface	RS232
Dimensions(H×W×D)	75×190×325mm (with 12Ah battery)
Weight	≤ 5kg (with 12Ah battery)
Operational Battery Life (1:1:8)	≥ 24H(12Ah)
ENVIRONMENTAL	
Storage Temperature	-40°C to +85°C
Operating Temperature	-40°C to +65°C (Low temperature Battery)
Immersion	2m, 4H
Shock & Vibration	MIL-STD-810G

TRANSMITTER	
Power Output	0.5/5/10W
Spurious Emission	≤ -70dBc
Harmonic Suppression	≤ -50dBc
Frequency Stability	± 0.5ppm

RECEIVER	
Sensitivity	≤ -118dBm （SINAD=12dB）
IF Rejection	≥ 90dB
Adjacent Channel Rejection	≥ 50dB
Audio Power	10mW (600Ω)
Audio Distortion	≤ 3%

ELECTRONIC PROTECTION MEASURE (EPM)	
EMC/EMI	MIL-STD-461F
ECCM	FH/FCS
Hopping Rate	1,000hops/s
Initial Synchronization Time	≤80ms
Synchronization Reliability	≥ 98%

ACCESSORIES



AN0059W03
2.4m Foldable Antenna



SM33A01
Palm Microphone with Display



POA161
Key Fill Gun



BL3813
12Ah Battery



CH40L13
Charger



SM20N1
Tactical Handset

VHF RADIOS BASED FAMILY



Power Amplifier (50W)



Handheld Radio (4W)



Manpack Radio (10W)



Vehicular Radio (50W)

MCR550

Advanced VHF COMSEC/ECCM manpack radio for reliable voice and data communications

The MR9560 Radio is intended for land forces such as infantries, forward observers, snipers, special forces and anti-terror units, and can be deployed at the platoon or company level. The radio owns compact, lightweight and ruggedized characters, which assures reliability and maneuverability in demanding mission critical conditions.

The MR9560 provides continuous coverage in the 30~87.975 MHz frequency band. By applying with the Software Defined Radio (SDR) architecture, the radio offers three progressive waveforms (CNR/VRN/PRN) to guarantee a more stable transmission, longer distance and greater speed for secured communication. With the high data throughput, it benefits to weapon system control, battlefield supervision and real-time situational awareness.

The VHF manpack radio is packed with numerous advanced functionalities, for instance: simultaneous voice and data, automatic position reporting using an internal or external GPS receiver, VOX, integration with tactical messaging or image transmission applications.

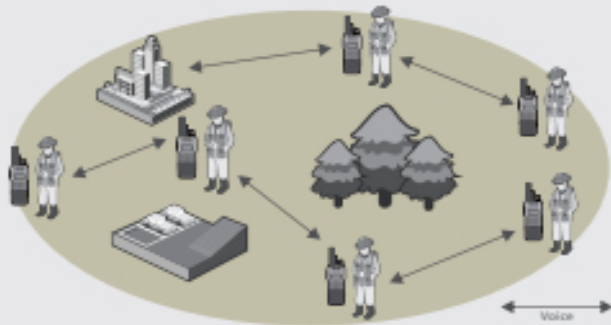




ADVANCED WAVEFORMS

Combat Net Radio (CNR)

CNR's primary role is voice or data transmission in battlefield via point to point/ point to multi-points communication. The CNR attributes 4 modes: FM (Frequency Modulation), FF (Fixed Frequency), FH (Frequency Hopping) and FCS (Free Channel Search).

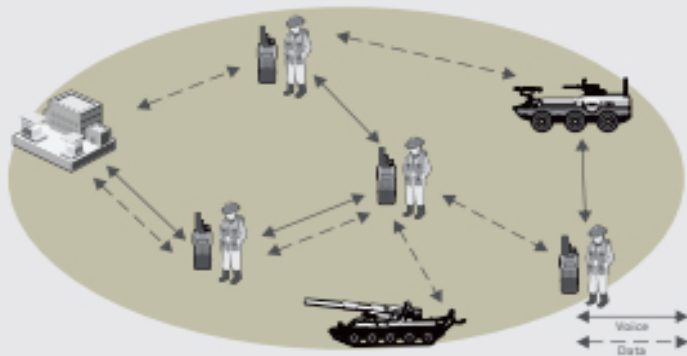


Voice Relay Network (VRN)

VRN extends voice communication distance by chaining, resolves the communication issues in complicated scenarios, for example underground, jungle and trench. The VRN can be spread up to 6 hops relaying in both FF and FH modes.

Packet Radio Network (PRN)

PRN mainly serves as data transmission for man to machine and machine to machine in battlefield. Based on Mobile Ad-Hoc Network (MANET) technology, the PRN contains abilities of decentralization, self-healing, self-forming, dynamic topology and simultaneous voice and data. The transmission distance can be stretched significantly by up to 6 hops in 32 nodes maximum.



Electronic Counter-Counter Measures(ECCM)



Frequency Hopping (FH)
The radio contains a frequency hopping rate of 1,000 hops per second which ensures the communication can be succeeded with up to 70 % of working band interfered, whereas the communication distance will not be degraded.



Free Channel Search (FCS)
FCS mode is intended for operations that requires frequency agility in an high-noise or wideband radio-jamming environment.

Reliability



Optimized Battery Performances
Continuously working for at least 24 hours (1:1:8, 12Ah) through the unique adaptive energy saving technique. The operation temperature can be expanded to -40°C ~ +65°C by adopting the low temperature battery.



Ruggedized
The RK675 and its accessories are certified MIL-STD-810G, with a improved waterproof capability of submersion in 2 meters water for up to 4 hours.

HIGHLIGHTS

Communication Security (COMSEC)



Encryption
The RK675 provides AES 256 bit software encryption for both voice and data communication, as well as supports customized encryption board.



Key filling
Key fill gun offers 6 functions: confidential information storage, networking configurations injection, encryption parameters backup, identity authentication, key erasing execution and also reserves key storage ability even if in the event of power loss.



Key erasing
The radio affords diverse methods to prevent the secured information disclosure through erasing the key manually or automatically, i.e., manually erasing the key by holding the combined buttons even if the radio is shut down; automatically erasing the key when the radio was disassembled.

Usability



GPS build-in module enables Team Leaders at the tactical level to track individual soldier position location information (PLI), enabling situational awareness.



OLED screen provides high brightness, wider viewing range, and readable capability under direct sunlight.



Power and volume button design as a 2 in 1 knob, accompanying with a user-defined key and several shortcut keys.



Versatile applications such as data transmission software, PC programming kit, tactical data-link interface and dispatch platform offer immediate manipulation readiness.