

Specifications

General	
Frequency Range	1.60000MHz ~ 29.99999MHz
Frequency Stability	0.5ppm
Channel Spacing	10Hz
Channels	1000
Modulation	USB/LSB/CW/AM
RF Impedance	50 Ω
Power	Nominal Voltage: 14.4V , Range: 12 ~ 16.8 V
Data Interface	K/RS232/Ethernet/USB/Bluetooth
Dimensions	190W ×75H×215D mm (Without Battery)
Weight	3.3kg (Without Battery)
ECCM	FH
COMSEC	AES 256 Bits Adavanced Encyption , Encyption Board Interface

Environmental	
Storage Temperature	-45℃ ~ +70℃
Operating Temperature	-40℃ ~ +65℃
Immersion	5 meters of water
Environmental Conditions	MIL-STD-810F

Transmitter	
Output Power	5/20 W
Audio Modulation	≤ -3 dB
Carrier Supression	≤ -50 dB
Undesired Sideband Supression	≤ -50dB
In-band Mirror Lobe	≤ -40dB
Receiver	
Sensitivity	≤ -111dBm(SINDA=12dB)
Audio Intermodulation	≤ -40dB
Out-of-band Intermodulation	≥ 70 dB
Power Consumption	≤ 10W
Audio Distortion	≤ 3%

Automatic Link Establishment (ALE)	
ALE Types	2G ALE and 3G ALE
ALE Nets	Up to 20 predefined nets
Frequency Tables	100
Frequency Table Length	10

Accessories



15 Meters Cable-stayed Antenna



3 Meters Whip Antenna



Key Fill Gun



12Ah Battery



Handset



Headset

Vehicle-Mounted Power Amplifier



MCR9360-V01

MCR9360-V01Power Amplifier support plug-and-play for MCR760 HF tactical radio, the maximum power is up to 125W. Combined with vehicular antenna, it can effectively expend the communication range, which is suitable for wheeled vehicle, tracked vehicle, command post and the other long distance communication scenarios.

General	
Dimensions(H×W×D)	136×190×367mm
Weight	≤ 7.5kg
Interface	K/ RS232/ Ethernet/ USB
Input Voltage	Standard Voltage+24V
Transmitter	
Output Power	20/50/125W
Carrier Supression	≤ -50dBc
Undesired Sideband Supression	≤ -50dBc
Reciever	
FM Sensitivity	≤ -115dBm (SINAD=10dB)
Out-of-band Intermodulation	≥ 70dB
Environmental	
Operating Temperature	-25°C to +65°C
Immersion	5 meters of water
Environmental Conditions	MIL-STD-810F



MCR760 Tactical HF Manpack

Advanced SDR HF radio system for digital and analog voice and data communications

The MCR760 radio system - designed to surpass the traditional limitations of HF communications. Offering advanced COMSEC and ECCM functions, this radio system delivers superior HF performance, maintaining uninterrupted data and voice communications on the battlefield. It also incorporate a wide range of proprietary tactical antennas, specially designed to address complex operational scenarios. In addition, the radio system is available in multiple configurations, including lightweight manpack, vehicular and fixed station.



MCR760

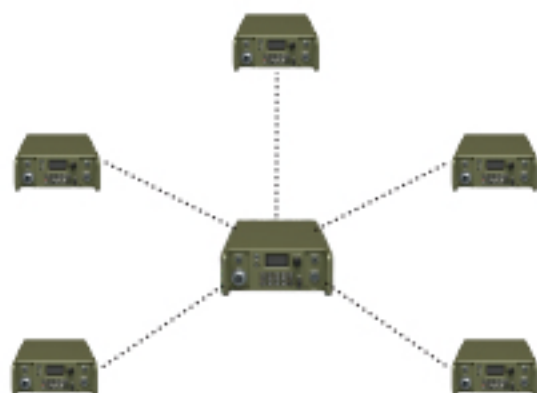


Networking Modes

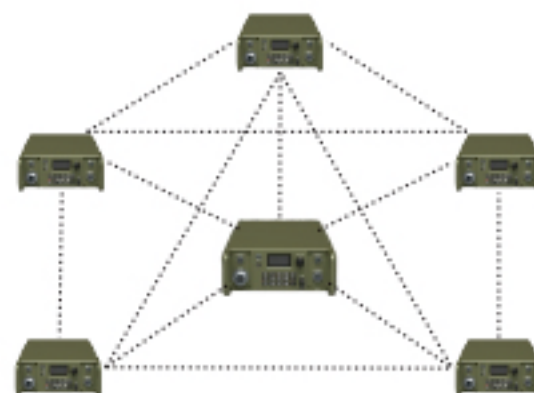
There are mainly two kinds of networking modes for HF radio.

Star topology: Used for centralized dispatching, broadcasting system. Suitable for voice link, transmitting to those above and those below.

Network topology: Mutual service and wide compatibility. Suitable for data exchange and multi network interconnection.



Star Topology



Net Topology

Application Configurations



The MR9360 manpack radio is small and light, suitable for front-line soldiers. Working with whip antenna is suitable for communication within 15km. Working with bipolar or cable-stayed antenna can meet the communication requirements in the range from 80 to 200km.



The integration of man-pack radio, power amplifier and automatic antenna tuner can expand the communication distance by thousands kilometers and can cover a wider range. It can be quickly deployed in tanks, armored vehicles, cabins, helicopters, naval ships and other mobile platforms, it can also be fixed installed in battlefield command point to expand the battlefield command and dispatching range.



Highlights

Communication Ability



Fast Frequency Selection (FFS)

Through broadband reception, RF direct sampling and other technologies, it can automatically and quickly select the best communication frequency point for communication to ensure timely and reliable transmission of combat information under various situations.



600bps Vocoder

Equipped with 600bps low-rate vocoder, suitable for digital telephone communication in narrow-band, expensive and inferior channel conditions.

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 provide high brightness, wider viewing range, and readable capability under direct sunlight.



BATTERY performances is optimized, it can continuously working for at least 12 hours (1:1-8, 12Ah) through the unique adaptive energy saving technique.



MODULAR design has simple structure and reasonable layout, which is conducive to product upgrade. Rectangular interface blind plug-in mode, convenient for module assembling and replacement;

Communication Security (COMSEC)



Encryption

The PR9560 provides AES 256 bits 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

Reliability



Waterproof

Radio systems and headset, palm microphone with display and other accessories all has the improved waterproof capability of submersion in 5 meters water for up to 2 hours.



Ruggedized

MR9360 and its accessories meet MIL-STD-810G requirements, ensure product performance and communication stability and reliability during wartime and exercise.



Temperature

With low temperature battery, it can work normally from -40°C to 60°C.