Hytera
Respond & Achieve

Specifications

General	Frequency Range		UHF1：400-470MHz；UHF2：450-520MHz UHF3：350-400MHz；VHF：136-174MHz
	Channel Capacity		16
	Channel Spacing		25/20/12.5KHz
	Operating Voltage		DC: 13.6 V 15% Battery: 14.8V
	Current Drain	Standby	≤0.8A
		Transmit	≤3.5A
	Battery		10Ah（Li-Ion）
	Battery Life(5-5-90 Duty Cycle, High TX Power)		8h
	Frequency Stability		±0.5ppm
	Antenna Impedance		50Ω
	Duty Cycle		100%
	Dimensions (H W D)		52x183x302mm(with Repeater & Protection case) 42x172x280mm(without Repeater & Protection case)
	Weight		3.5Kg (without standard battery)
Receiver	Sensitivity	Analog	0.3 V (12dB SINAD)； 0.22 V (Typical) (12dB SINAD); 0.4 V (20dB SINAD)
		Digital	0.3 μ V /BER5%
	Selectivity TIA-603 ETSI		65dB @ 12.5KHz / 75dB @ 20/25KHz 60dB @ 12.5KHz / 70dB @ 20/25KHz
	Intermodulation TIA-603 ETSI		75dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz
	Spurious Response Rejection TIA-603 ETSI		75dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz
	Blocking TIA-603 ETSI		90dB 84dB
	S/N		40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz
	Rated Audio Power Output		0.5W
	Rated Audio Distortion		≤3%
	Audio Response		+1 ~ -3dB
	Conducted Spurious Emission		< -57dBm

Transmitter	RF Power Output	1-10W (adjustable)
	FM Modulation	11KΦF3E @ 12.5KHz; 14KΦF3E @ 20KHz; 16KΦF3E @ 25KHz
	4FSK Digital Modulation	12.5KHz Data Only: 7K6 FXD 12.5KHz Data & Voice: 7K6 FXW
	Conducted/Radiated Emission	-36dBm<1GHz; -30dBm>1GHz
	Modulation Limiting	±2.5KHz @ 12.5KHz; ±4.0KHz @ 20KHz; ±5.0KHz @ 25KHz
	FM Hum & Noise	40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz
	Adjacent Channel Power	60dB @ 12.5KHz; 70dB @ 20/25KHz
	Audio Response	+1 ~ -3dB
	Audio Distortion	≤3%
	Digital Vocoder Type	AMBE++或SELP
	Digital Protocol	ETSI-TS102 361-1，2&3
Environmental Specifications	Operating Temperature	-30℃ ~ +60℃
	Storage Temperature	-40℃ ~ +85℃
	ESD	IEC 61000-4-2（level 4） ±8KV(contact) ±15kV（air）
	American Military Standard	MIL-STD-810 C/D/E/F/G
	Dust & Water Intrusion	IP67 Standard
	Humidity	Per MIL-STD-810 C/D/E/F/G Standard
	Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard
GPS	TTFF (Time To First Fix) Cold Start	<1 minute
	TTFF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<10 meters

All Specifications are subject to change without notice due to continuous development.

Accessories

Smart Battery　Backpack　Remote Speaker Microphone(RSM)　Multi-function Bracket

RD96X

Digital Portable Repeater

- **Slim and Portable**
- **Built-in Duplexer**
- **Emergency Port**
- **User-friendly Panel**
- **External Battery**

DMR
DIGITAL MOBILE RADIO ASSOCIATION

Hytera
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RD96X

RD96X is Hytera's first digital/analog portable repeater that is compatible with the DMR standard. Compact and embedded with a mini duplexer, the device is fairly wieldy. Equipped with a wide selection of components, RD96X easily fits into various application scenarios, whether on your back and a wall or in your suitcase and a cabinet. It supports a range of power supply plans to guarantee uninterrupted communications during emergencies; its API and 100 Mbps network port combine to support an extended array of applications; the device provides IP67 protection, making it reliable in any hostile operating environment.

Applications

Public Safety Forest Industry Firefighters Hotels

Ergonomic Design

- **Slim and Portable**
  Based on a compact design, the device measures only 42mm and weighs less than 5kg, (include the 10Ah battery).
- **Flexible Applications**
  Fitted with a wide variety of components, the product can be desk or wall-mounted for in-building coverage, installed in a mobile suitcase or cabinet for emergency communications, or carried on the back for forest firefighting.
- **Built-in Duplexer**
  Embedded with an optional mini duplexer, RD96X can be slimmer in size.
- **External Battery**
  With an external large-capacity battery, the device delivers an extended battery life to guarantee uninterrupted communications.
- **Emergency Port**
  The port allows for power connection in emergencies.
- **IP67 Protection**
  Compatible with the IP67, the device can operate properly under immersion test (1meter for up to 30 minutes).
- **Reliable and Durable**
  Compatible with the American military standard MIL-STD-810 C/D/E/F/G and HALTverified, the device can perform excellently in hostile operating environments.
- **User-friendly Panel**
  The operating panel provides a wide range of channel status indicators, a button for channel adjustment, and a port for palm microphone or remote speaker microphone.

Additional Features

- **GPS**
  The GPS module supports GPS data transmission and enables emergency command centers to monitor the location of a small mobile network in real time.
- **Smart Battery (optional)**
  A 10Ah smart Li-Ion battery can support at least eight hours of work when working at 50% duty cycle and high TX power. Compatible with the smbus1.1 standard, RD96X can monitor battery conditions such as estimated remaining capacity, used capacity percentage, and usage record; the device can also maximize the battery life; through smart charge management, it can automatically recharge the battery for use anytime; powered by three levels of battery protection, the device considerably enhances charging safety and reliably.
- **Repeater Diagnostics and Control**
  Through a PC-based application, the product can monitor, diagnose and control remote (connected to the Internet via an IP port) and local repeaters (via a USB port), thus increasing the productivity. Hytera's RDAC software supports network access at multiple points and allows the administrator to monitor networked two-way radios.
- **Voice Input/output via Dual Time Slots: easy for monitoring and voice recording**
  In digital mode, the device supports voice input and output via dual time slots and enables users to record calls continuously.
- **Digital/analog Compatibility and Smart Switching**
  Back to back interconnection of digital & analog network can be achieved by wired or wireless IP, ensuring a smooth analog-to-digital transition.
- **Flexible Networking**
  By connecting geographically distributed repeaters that run at the same or different frequencies to form an IP-based and location-independent wireless communication network, IP-based repeater interconnection allows mobile radios to obtain voice and data services while roaming.
- **16 Channels**
  The product supports up to 16 channels. You can switch between channels using PCbased RDAC software, the channel selector knob on the front panel, or the external interface on the repeater.
- **Digital-analog Interconnection for Smooth Transition**
  The feature enables two-way radios with digital and analog capabilities, and digital and analog users to intercommunicate in different operating modes to guarantee users' seamless transition from analog to digital capabilities.
- **Supports Operating both in Analog and Digital Mode**
- **Upgradable Software**
  This enables you to easily add functions through software upgrade without purchasing a new device.