



# RD982

Digital Dual-Mode Repeater  
with Display & Programmable Keys



As a professional repeater built to the DMR standard, the RD982 brings you a NEW cutting edge technology at an exceptional value backed by a 3 year manufacturer's warranty. The RD982's dual-mode auto-detection ensures your business will have a smooth transition from the analog to the digital era.



Clear Digital Communications Using DMR Technology

Large Color LCD Allows for a Full View of Messages & Alerts

Narrow-Band Compliant with the FCC 2013 Mandate

Smart Analog/Digital Detection Allows for Easy Migration



# Specifications

General	
Frequency Range	UHF: 400-470MHz VHF:136-174MHz
Channel Capacity	16
Channel Capacity	25/20/12.5 kHz
Operating Voltage	13.6±15% V DC
Current Drain	Current Drain
	Transmit
Transmit	±1ppm
Antenna Impedance	50Ω
Duty Cycle	100%
Dimensions (WxHxD)	483 X 88 X 366 mm / 19.02 X 3.46 X 14.4 in.
Weight	8.5 Kg / 18.7 lbs.
LCD Display	220X176 pixels; 262,000 colors

Receiver	
Sensitivity(Analog)	0.3μV (12dB SINAD)
	0.22μV (Typical) (12dB SINAD)
	0.4μV (20dB SINAD)
Sensitivity(Digital)	0.3μV/BER5%
Blocking	100dB
Adjacent Channel Selectivity	65dB @ 12.5 kHz / 75dB @ 20/25 kHz
Intermodulation	75dB
Spurious Response Rejection	85dB
S/N	40dB @ 12.5 kHz
	43dB @ 20 kHz
	45dB @ 25 kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	3%
Audio Response	+1~-3 dB
Conducted Spurious Emission	-57 dBm

Transmitter	
RF Power Output	5-50W(Continuous)
FM Modulation	11KφF3E @ 12.5 kHz
	14KφF3E @ 20 kHz
	16KφF3E @ 25 kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K6φFXD 12.5kHz Data+Voice: 7K6φFXW
Conducted/Radiated Emission	-36dBm <1GHz -30dBm >1GHz
Modulation Limiting	±2.5kHz @ 12.5 kHz
	±4.0 kHz @ 20 kHz
	±5.0kHz @ 25 kHz
FM Noise	40dB @ 12.5 kHz
	43dB @ 20 kHz
	45dB @ 25 kHz
Adjacent Channel Power	60dB @ 12.5 kHz 70dB @ 20/25KHz
Audio Response	+1 ~ -3dB
Audio Distortion	3%
Digital Vocoder Type	AMBE++/SELP

Environmental Specifications		
Operating Temperature	-30°C ~ +60°C	-22°F ~ +140°F
Storage Temperature	-40°C ~ +85°C	-40°F ~ +185°F

All Specifications are tested according to applicable standards, and subject to change without notice due to continuous development.



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## Mechanical Design Features

2RU

Standard 19", 2RU Rack-Mount Design, Compatible with Desktop Housing as Well

LED

Colored LEDs for Clear Status Indication



Advanced Heat Sink Design with Thermal-Controlled Cooling Fan



Ergonomic Grip Design Makes Handling Easier



Programmable Buttons for Customized Application



2.0" TFT LCD with Menu Navigation & Control Knob



Internal Installation for Mobile Duplexer

## Standard Accessories



Power-PWC11

## Optional Accessories

							
Palm Microphone SM16A1	Palm Microphone SM16A1	Desktop Microphone SM10A1	Antenna	Directional Antenna	Duplexer Installation Kit (For Dt11)	Rack Mount Power Supply SEC-1223R1	Installation Kit (for Rack Mount Power Supply) BRK12

**Hytera**  
Digital Value is Here



## Product Highlights



### Dual-Mode Auto-Detect

The repeater supports digital and analog modes. It can automatically detect the mode based on the type of received signal.

### TDMA Technology

The application of Time Division Multiple Access (TDMA) technology greatly enhances spectrum efficiency, which allows twice (2:1) the amount of users compared to traditional FDMA technology.

This new technology can not only save operational costs, but also relieves the stress on our decreasing spectrum resources.



### 128-Bit Encryption

The advanced 128-bit encryption technology can secure your communication and ensure enhanced privacy.

### Advanced Heat Dissipation

The unique cooling design combined with a built-in heat sink and a temperature-controlled fan ensure quick heat dissipation. This enables the repeater to work normally even at full power.



### Innovative LED Design

The innovative LEDs and the 2.0" HD color display convey the repeater status clearly even in bright environments.

### Remote Diagnostics

With the management software, you can remotely monitor and diagnose a repeater. In addition, you can either record or play back the audio freely in digital mode.

### IP Connectivity

Ability to connect multiple repeaters on a single-site application or a multi-site wide area network.