

# Specifications



General		Transmitter	
Frequency Range	UHF: 400-470MHz VHF:136-174MHz	RF Power Output	5-50W ( Continuous )
Channel Capacity	16	FM Modulation	11KΦF3E @ 12.5 kHz 14KΦF3E @ 20 kHz 16KΦF3E @ 25 kHz
Channel Capacity	25/20/12.5 kHz	4FSK Digital Modulation	12.5kHz Data Only: 7K6ΦFXD 12.5kHz Data & Voice: 7K6ΦFXW
Operating Voltage	13.6 ± 15% V DC	Conducted/Radiated Emission	-36dBm <1GHz -30dBm >1GHz
Current Drain	Standby	1.2A	Modulation Limiting
	Transmit	12A	
Frequency Stability	± 1ppm	FM Hum and Noise	40dB @ 12.5 kHz 43dB @ 20 kHz 45dB @ 25 kHz
Antenna Impedance	50Ω		
Duty Cycle	100%	Audio Response	+1 ~ -3dB
Dimensions (W×H×D)	483 X 88 X 366 mm	Audio Distortion	3%
Weight	8.5 Kg	Digital Vocoder Type	AMBE++/SELP
LCD Display	220X176 pixels; 262,000 colors	<b>Environmental Specifications</b>	
<b>Receiver</b>		Operating Temperature	-30°C ~ +60°C
Sensitivity(Analog)	0.3 μ V (12dB SINAD) 0.22 μ V (Typical) (12dB SINAD) 0.4 μ V (20dB SINAD)	Storage Temperature	-40°C ~ +85°C
Sensitivity(Digital)	0.3 μ V/BER5%	All Specifications are tested according to applicable standards, and subject to change without notice due to continuous development.	
Blocking	100dB		
Adjacent Channel Selectivity	TIA-603 65dB @ 12.5 kHz / 75dB @ 20/25 kHz ETSI 65dB @ 12.5 kHz / 75dB @ 20/25 kHz		
Intermodulation	TIA-603 75dB@12.5/20/25KHz ETSI 70dB@12.5/20/25KHz		
Spurious Response Rejection	TIA-603 85dB@12.5/20/25KHz ETSI 80dB@12.5/20/25KHz		
Hum and Noise	40dB @ 12.5 kHz 43dB @ 20 kHz 45dB @ 25 kHz		
Rated Audio Power Output	0.5W		
Audio Distortion	3%		
Audio Response	+1 ~ -3 dB		
Conducted Spurious Emission	-57 dBm		



# RD985

## Powerful Digital Repeater

As a professional repeater built to the DMR standard, RD985 integrates user concerns and actual requirements. Powerful digital feature, remarkable service quality and considerate ergonomic design. It will refresh your communication experience!



- Smart A/D Detection, Smooth Migration
- Outstanding Reliability



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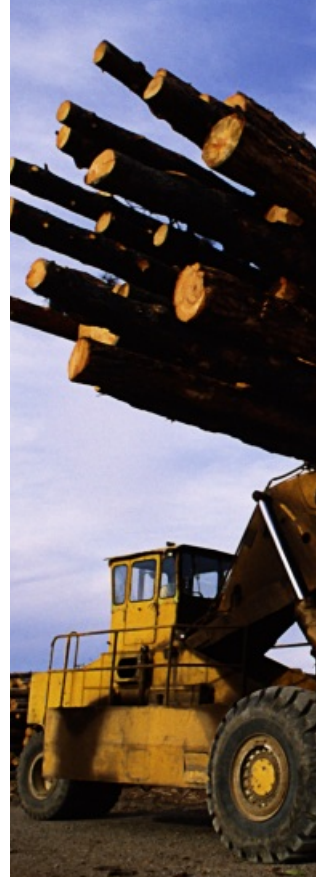
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Higher Efficiency  
Richer Experience



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

Ergonomics handle design makes handling more comfortable

Programmable buttons for customized application

2.0" TFT LCD and menu navigation knob to facilitate service and maintenance

Internal installation for mobile duplexer



Product Features >>



Smart Analog & Digital Auto Detection

This repeater supports digital and analog modes. It can smartly select the right one based on the type of received signal, allowing you to enjoy digital delights with ease.

Advanced TDMA Technology

The application of Time Division Multiple Access (TDMA) technology greatly enhances spectrum efficiency, which allows twice the user compared with that of traditional FDMA. Obviously, this can not only save your cost in infrastructure and frequency license, but also relieve the pressure of increasing shortage in spectrum resources.



128-bit Digital Encryption

The advanced 128-bit encryption technology can secure your communication from being eavesdropped.

Outstanding Reliability

The unique seatsink design combining a built-in heat pipe and a temperature-controlled fan ensures quick heat dissipation, enabling the repeater to work normally even with full power.



Handy Management Service

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.

Innovative LED Design

The innovative LED and the 2.0" HD color display would deliver you the repeater status clearly, as well as a pleasing visual experience.

Standard Accessories >>



DC Power Cable PWC11

Optional Accessories >>



Programming Cable (USB Port) PC37

Palm Microphone SM16A1

Desktop Microphone SM10A1

Omnidirectional Antenna

Directional Antenna

Duplexer Installation Kit (Apply to Hytera-approved Model Only)

Desktop Power Supply (300W) PS22002

Rack-mount Installation Kit (For PS22002 only) BRK12