



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**

**Higher Efficiency
Richer Experience**



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.

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

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

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	Standby	1.2A
	Transmit	12A
Frequency Stability	± 1ppm	
Antenna Impedance	50Ω	
Duty Cycle	100%	
Dimensions (W×H×D)	483 X 88 X 366 mm	
Weight	8.5 Kg	
LCD Display	220X176 pixels; 262,000 colors	

Receiver		
Sensitivity(Analog)	0.3 μ V (12dB SINAD)	
	0.22 μ V (Typical) (12dB SINAD)	
	0.4 μ V (20dB SINAD)	
Sensitivity(Digital)	0.3 μ V/BER5%	
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	

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 Hum and 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
Storage Temperature	-40°C ~ +85°C

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



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Hytera Communications Corporation Limited

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