i SERIES

Hytera

Indoor Wall Mountable Repeater

RD622 *i* SERIES

- DMR & Analog Auto Switching
- 3 in 1 Integrated Repeater: RF, Power Supply, & Optional Duplexer

DMR
DIGITAL MOBILE RADIO ASSOCIATION

www.hytera.us

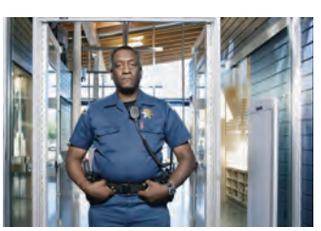
RD622

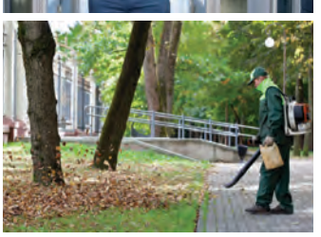
i SERIES

An indoor DMR and Analog dual mode repeater in a compact design, embedded with a power supply and optional mini duplexer. Its innovative design enables it to easily support wall-mount installation with AC/DC power. Multiple sites can connect via IP along with the RD982i to support flexible wide area and large building coverage. Integration with Hytera Dispatch System or other 3rd party GPS dispatching software can be achieved by the RJ45 port in the side of the repeater.

Applications

Hotel | Malls | Hospital | Education | Security | Property Management





Product Features

- **All-In-One Compact Design**
  Compact design, integrates RF, power supply, and optional duplexer into one box, which makes the RD622i smaller, lighter, and easier for wall-mount installation and indoor coverage (wall-mount bracket sold seperately BRK21).

- **Multi CTCSS / CDCSS Decode**
  Decoding up to a maximum of 16 CDCSS/CTCSS codes in Analog channels allowing coverage for different Analog voice users from various groups.

- **Repeater Access Management**
  A repeater access control feature allowing better security to prevent unauthorized users from accessing the radio network.

- **Analog Scan**
  Analog voice and signaling scan, allowing coverage of different analog voice users from various groups.

- **AC / DC Auto Switch**
  The integrated power supply provides float charging for a backup battery. If the AC power fails, the DC power (battery) automatically takes over without interruption.

- **Interoperability**
  Two repeaters can be interconnected to provide interoperability between UHF and VHF. A single repeater can auto switch between Analog and Digital mode, allowing for efficient frequency sharing between Analog and Digital users and an easy digital migration.

- **Digital Audio Streaming of Dual Time Slots**
  The streaming of both the voice slots via the rear port accessory pins, allowing for capability expansion via future development and recording of communications via Hytera Dispatch System.
  See example below.

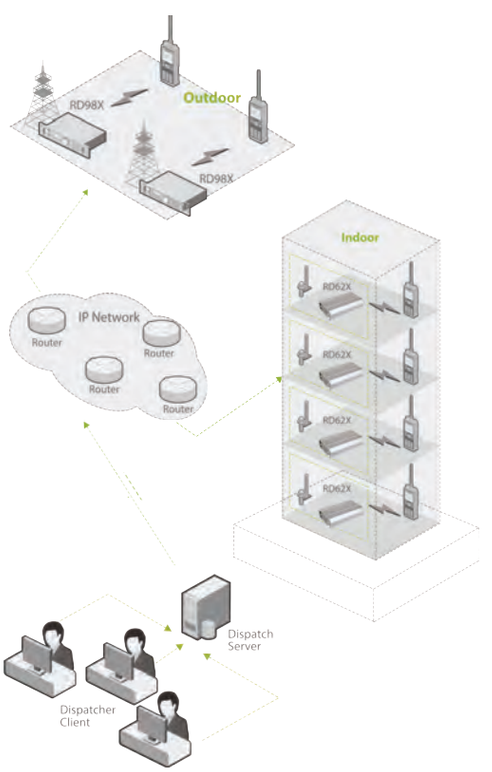
Slot 1 is used for voice call 1, Slot 2 is used for voice call 2

- **Repeater Diagnostic And Control (RDAC)**
  Remote IP connection to monitor, diagnose, and control the repeater thus increasing maintenance efficiency. The Hytera developed RDAC is able to support multiple master network connections to allow the radio administrator to monitor multiple radio networks.

- **Multiple Sites via IP**
  Network connection via the IP port of the repeater to form a private radio network to meet data and voice communication needs for wide-area coverage and dispersed locations. See example below.

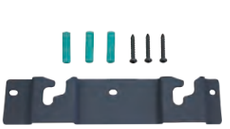
- **Over-the-air Signaling Encryption**
  For secure communications, RD982i supports over-the-air encryption to protect the signaling frames of both voice and data services.

- **Out-of-range Notification**
  A radio is always notified when it has left the repeater coverage. The users can realize if they are in the talk range all the time by paying attention to the alert tone.



Accessories

Optional



Mounting
Bracket
BRK21

V AC Power
Cord
PWC03

Programming Cable
(USB Port)
PC40

V DC Power
Cord
PWC06

See website for full list

Specifications

General	Frequency Range	VHF: 136 - 174MHz UHF1: 400 - 470MHz	
	Channel Capacity	16	
	Channel Spacing	25 / 20 / 12.5KHz	
	Operating Voltage	13.6 V DC ± 15% ; 90-264V AC	
	Current Drain	Standby	≤ 0.5A
		Transmit	≤ 5.5A
	Frequency Stability	± 0.5ppm	
	Antenna Impedance	50 Ω	
	Duty Cycle	100%	
	Dimensions (HxWxD)	11.85 x 7.24 x 2 inches	
	Weight	6.61 lbs	
	FCC ID	See website for full list	
	Industry Canada ID	See website for full list	

Environmental Specifications	Operating Temperature	-22°F ~ +140°F
	Storage Temperature	-40°F~ +185°F
	ESD	N/A
	American Military Standard	N/A
	Dust & Water Intrusion	N/A
	Humidity	N/A
	Shock & Vibration	N/A

Transmitter	RF Power Output	1-25W (continuous)
	FM Modulation (Analog Emissions Designator)	11K ϕF3E @ 12.5KHz ; 14KϕF3E @ 20KHz ; 16KϕF3E @ 25KHz
	4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7K6ϕFXD 12.5KHz Data & Voice: 7K6ϕFXW
	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+2 ™
	Digital Protocol	ETSI-TS102 361-1, 2&3

Receiver	Sensitivity	Analog	0.3 μ V (12dB SINAD) ; 0.22 μ V (Typical) (12dB SINAD); 0.4 μ 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 Distortion	≤ 3%	
	Audio Response	+1 ~ -3dB	
	Conducted Spurious Emission	< -57dBm	

Your Local Dealer

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Respond & Achieve

i SERIES

Hytera America

3315 Commerce Parkway, Miramar, FL 33025, United States
Telephone: +1(954)846-1011

8 Whatney, Suite 200, Irvine, CA 92618, United States
Telephone: +1(949)326-5740

1916 Wright Boulevard, Schaumburg, IL 60193, United States
Telephone: +1 (213) 262-3578

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