i SERIES

Hytera

Powerful Digital Repeater

RD982 i SERIES

- Smart Digital - Analog Switch
- Outstanding Heat Dissipation

DMR
DIGITAL MOBILE RADIO ASSOCIATION

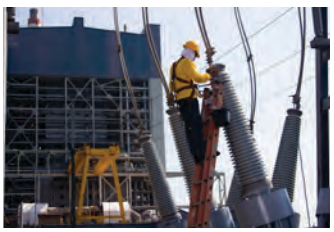
www.hytera.us

RD982 i SERIES

The RD982i and RD982i-S are open-standard DMR repeaters capable of being connected via the internet to multiple sites as well as integrated with Hytera SmartDispatch or other 3rd party GPS dispatching software. The RD982i is capable of being upgraded to trunking at a future date as capacity requirements increase. The analog version of the RD982i provides organizations with an easy migration path to digital technology.

Applications

Education Utilities Transportation Manufacturing Forestry Security Stadiums Hospital


Product Features

- **Dual Mode: Analog & Digital**
  Dual Mode Analog and Digital channel auto switching, allowing efficient frequency sharing between Analog and Digital users and ensures a smooth transition to Digital technology.
- **50W High Power**
  Maximum repeating power of 50W, and thus increasing the system coverage with lesser setup equipments.
- **16 Channels**
  A maximum of 16 channels, allowing efficient radio network control at different scenarios. The channel change can be performed either via RDAC PC tools, via the repeater's front panel channel knob and via the channel steering from the repeater's rear port.
- **Heat Dissipation**
  The unique cooling design combining a built-in heat pipe and a temperature-controlled fan ensures quick heat dissipation, enabling the repeater to operate efficiently even with full power.
- **Management Software**
  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.
- **Expansion Ports**
  This allows third parties to develop accessory and applications via front and rear port of the repeater. This is achieved via the signal streaming and pin control through the repeater ports.
- **Dual Slot Digital Audio Streaming**
  Streaming of both the voice slots via the rear port accessory pins, allowing third party for capability expansion.
- **Continuous Wave Identification (CWID)**
  Analog transmission of the repeater identification in Morse code format.
- **Analog Scan**
  Analog voice and signaling scan, allowing coverage of different analog voice users from various groups.
- **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.
- **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. It's available in digital mode operation or analog mode operation (RD982i-S only).
- **Advanced TDMA Technology**
  The application of Time Division Multiple Access (TDMA) technology greatly enhances spectrum efficiency, which allows twice the users compared with that of traditional FDMA. Obviously, this can not only save infrastructure cost and frequency licenses, but also relieve the pressure of increasing shortage in spectrum resources.
- **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.
- **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.
- **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**
  The repeater access control feature ensures a more secure network by preventing unauthorized users from accessing the radio network.
- **Analog/Digital Telephone Interconnect**
  Simplex voice communications between radio and telephone users. It allows a radio user to make a telephone call; or a telephone user to make either a Group or Private call to radio users. This feature utilizes SIP protocol to connect to IP-PBX gateway via IP.
- **Analog Repeater Knockdown**
  Repeater knockdown, that when activated via the repeater's rear accessory pin, will disabled the transmit path of the repeater.
- **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.
- **Interconnection between XPT and conventional system**
  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

Included
- Power Cord

Optional

Rackmount
Power Supply
SEC-1223R1

Duplexer
DT11through
DT17

Programming Cable
(USB Port)
PC37

Back to Back
Data Cable
PC49

See website for full list

Specifications

General	Frequency Range	VHF: 136 - 174MHz ; UHF1: 400 - 470MHz UHF2: 450-520MHz ; UHF3: 350 - 400MHz	
	Channel Capacity	16	
	Channel Spacing	25 / 20 / 12.5KHz	
	Operating Voltage	13.6V ± 15%	
	Current Drain	Standby	<0.8A
		Transmit	<11A
	Frequency Stability	±0.5ppm	
	Antenna Impedance	50 Ω	
	Duty Cycle	100%	
	Dimensions (HxWxD)	3.46 x 19 x 14.4 inches	
	Weight	18.74lbs	
	FCC ID	See website for full list	
	Industry Canada ID	See website for full list	

Environmental Specs	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	5-50W
	FM Modulation (Analog Emissions Designator)	11K ϕF3E @ 12.5KHz ; 14KϕF3E @ 20KHz ; 16KϕF3E @ 25KHz
	4FSK Digital Modulation (Digital Emissions Designator)	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+2 ™
	Digital Protocol	ETSI-TS102 361-1, 2 & 3

Receiver	Sensitivity	Analog	0.03 μ V (12dB SINAD) ; 0.22 μ V (Typical) (12dB SINAD); 0.4 μ V (20dB SINAD)
		Digital	0.03 μ V/BER5%
	Selectivity TIA-603 ETSI	65dB @ 12.5KHz / 75dB @ 20/25KHz 65dB @ 12.5KHz / 75dB @ 20/25KHz	
	Intermodulation TIA-603 ETSI	75dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz	
	Spurious Response Rejection TIA-603 ETSI	80dB @ 12.5/20/25KHz 80dB @ 12.5/20/25KHz	
	Blocking TIA-603 ETSI	90dB 90dB	
	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	

Your Local Dealer

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