

H-SERIES DMR RADIOS

EMPOWERED COMMUNICATIONS



Hytera HR1062 DMR Repeater

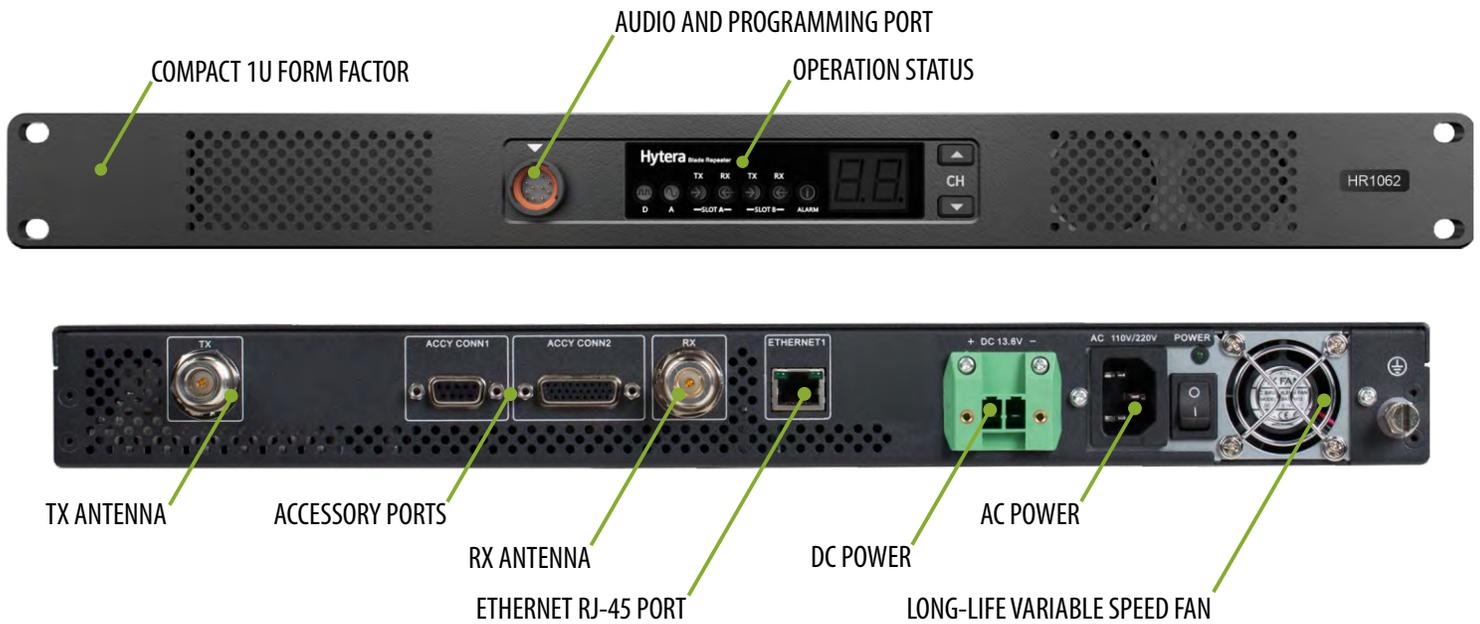
Hytera was a founding member of the DMR Association and was the first company to successfully deploy DMR Tier II and Tier III systems. Since then, Hytera has been a leading provider of DMR radios and systems, and has continuously improved products based on customer feedback.

The Hytera H-Series is the culmination of this experience and spirit of innovation. The HR1062 Blade Repeater and System Gateway is the next-generation in creative style and functionality that elevates the industry standards in professional digital two way radios.

The HR1062 is a new state-of-the-art radio repeater, providing a more efficient and reliable experience with outstanding performance, compact size, flexible power options, and unparalleled system interconnect capabilities.

THE NEW STANDARD OF QUALITY AND PERFORMANCE

- ◆ 1U Compact Form Factor
- ◆ Outstanding Performance and Reliability
- ◆ Flexible Interconnection to SIP Phones and Trunking Systems
- ◆ Integrated AC Power Supply with AC/DC Auto Switch



INNOVATIVE FEATURES



Compact 1U Form Factor

The 1U height is half that of conventional repeaters, and the HR1062 features a in-built power supply to save valuable rack space.



AC/DC Auto Switch

The HR1062 supports AC/DC auto switching for locations with different power sources, power redundancy, and eliminates the cost and space required for power adapters.



Analog & Digital Auto Switch

Mixed channel mode detects the receiving signal and automatically switches between analog and digital mode to provide a simple migration path.



Reliable Operation

Variable speed fan provides optimal cooling with front to back internal airflow, combined with high quality components to ensure 100% duty cycle operation for mission critical applications.



Flexible Radio Network Connectivity

The HR1062 supports a wide variety of analog and digital radio networks, including Analog and Digital Conventional, DMR Tier II, XPT Trunking, and DMR Tier III Trunking (available in mid 2022).



Wide Coverage

Enhanced Rx sensitivity extends communication range, and an Ethernet port provides access to IP networks to enable remote site connectivity.



DMR - 2 TDMA 2 Time Slots

TDMA digital technology provides 2 simultaneous voice channels that improves efficiency and doubles capacity without an extra frequency.



Higher Security

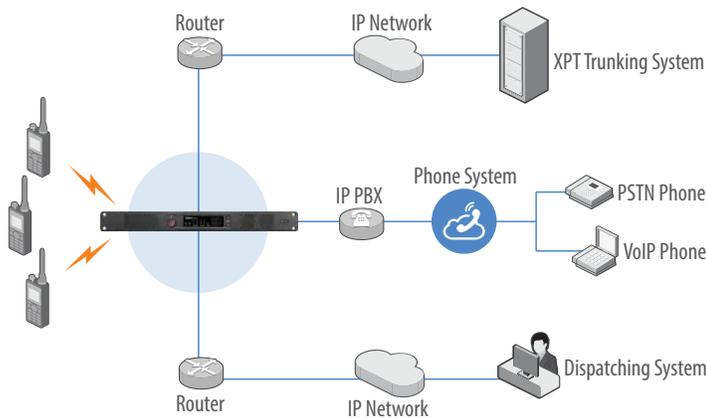
The HR1062 supports Digital End-to-End and Over-the-Air Encryption. This optional software-based encryption uses the secure and reliable ARC4 and AES encryption algorithms.

THE NEW STANDARD IN RADIO NETWORK CONNECTIVITY



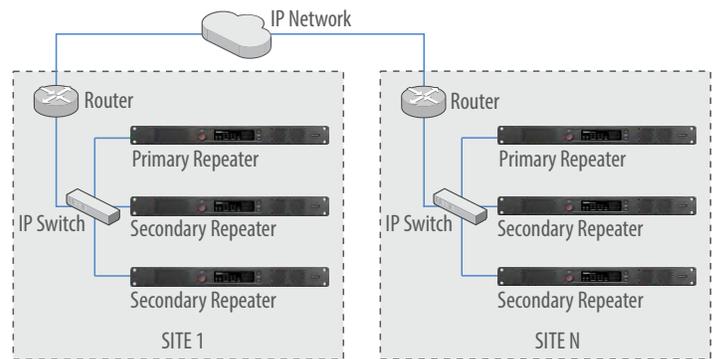
Flexible Interconnection

The HR1062 repeater is designed as an intelligent and seamless communication platform with the flexibility to connect with a variety of systems. The HR106X can provide inter-system connectivity to SIP and VoIP Phones, dispatching systems, and DMR Tier II, Tier III, and XPT Trunking Systems.



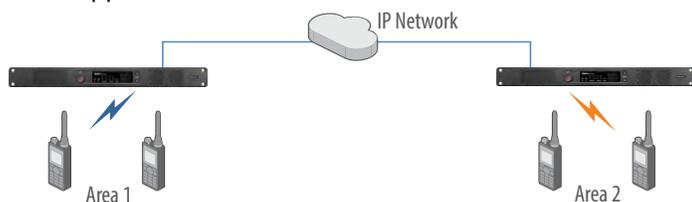
XPT Trunking System (License Required)

The XPT Trunking System is a widely-deployed, cost-efficient, and easily expandable radio system from Hytera. Based on proven repeater technology, XPT provides a wide-area distributed trunked radio system with increased capacity, and does not require a controller node and dedicated control channel for high-traffic users.



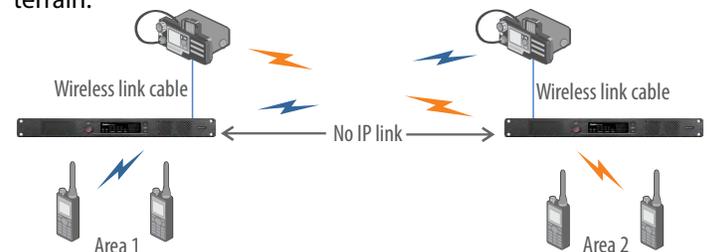
Back-to-Back

A back-to-back solution provides a cross-band communication IP Link between two repeaters to enable connectivity to analog and digital radios, or radios with different frequencies. The RD1062 supports 100% duty cycle that is ideal for heavy call traffic applications.



Wireless Link

Wireless Link Communication provides wireless connection between two systems when there is no IP link. Two HM782 mobile radios using different frequencies can provide a wireless link between the repeaters in remote locations with uneven terrain.



SPECIFICATIONS

General	
Frequency Range	UHF 400-470MHz, VHF 136-174MHz
Channel Capacity	64 Channels
Channel Spacing	12.5kHz / 20kHz / 25kHz
Operational Voltage	DC: 13.6V ±15% AC: 100-120V
Current Consumption	DC: Standby ≤0.9A, Transmitting ≤1.2A AC: Standby ≤0.35A, Transmitting ≤1.2A
Weight	17lb, 10oz (8.0 kg)
Dimensions (HxWxD)	Standard 1U: 13/4" x 19" x 143/4" (44 x 483 x 366mm)
Frequency Stability	± 0.5ppm
Antenna Impedance	50Ω
Duty Cycle	100%
Networking	Conventional Mode, MPT and XPT Trunking, Tier III Trunking Upgrade Capability, *Digital Trunking Lite (*coming soon)
Receiver	
Digital Sensitivity	0.2μV (BER5 5%) 0.18μV (Typical)/BER 5%
Analog Sensitivity	0.16μV (Typical) (12dB SINAD) 0.18μV (12dB SINAD)
Adjacent Selectivity	TIA-603: 65dB@12.5kHz, 75dB@20/25kHz ETSI: 60dB@12.5kHz, 70dB@20/25kHz
Spurious Response Rejection	TIA-603: 80dB@12.5/20/25kHz ETSI: 80dB@12.5/20/25kHz
Intermodulation	TIA-603: 75dB@12.5/20/25kHz ETSI: 70dB@12.5/20/25kHz
Blocking	90dB
Hum and Noise	40dB@12.5kHz, 43dB@20kHz, 45dB@25kHz
Rated Audio Distortion	≤3%
Audio Response	+1 to -3dB
Conducted Spurious Emission	≤1GHz: <-57dBm >1GHz: ≤-47dBm

Transmitter	
RF Power Output	5-50W adjustable
FM Modulation	11K0F3E @ 12.5kHz 14K0F3E @ 20kHz 16K0F3E @ 25kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data and Voice: 7K60FXW
Conducted/Radiated Emission	Operating: ≤1GHz: -36dBm >1GHz: -30dBm Standby: ≤1GHz: -57dBm >1GHz: -47dBm
Modulation Limiting	±2.5kHz @ 12.5kHz ±4.0kHz @ 20kHz ±5.0kHz @ 25kHz
FM Hum and Noise	40dB @ 12.5kHz, 43dB @ 20kHz, 45dB @ 20/25kHz
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 20/25kHz
Audio Response	+1 to -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE+2™
Digital Protocol	ETSI-TS 102 361-1,-2,-3
Environmental	
Operating Temperature	-22°F to +140°F (-30°C to +60°C)
Storage Temperature	-40°F to +185°F (-40°C to +85°C)

All specifications are subject to change without notice due to continuous development.

Ordering Information	
HR1062-U1	DMR Blade Repeater UHF 400-470MHz, 5-50W, DMR Tier II & Analog Conventional Mode
HR1062-V1	DMR Blade Repeater VHF 136-174MHz, 5-50W, DMR Tier II & Analog Conventional Mode

The HR1062 ships with a standard AC power cable.

OPTIONAL ACCESSORIES

Contact your Hytera dealer for additional optional accessories.



Programming Cables



External Duplexers



Back-to-Back Cables



PS22002 External Power Supply



SM09D1 External Speaker



SM10A1 Desktop Microphone



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