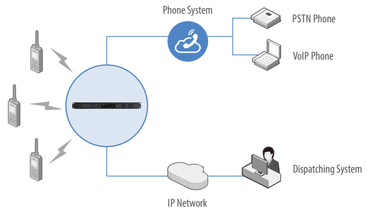
GENERAL SOLUTIONS

Hytera offers a wide range of solutions to enrich functionality for the HR1069 series repeater. Dispatching system, a back-to-back solution for cross-band communication. Additionally the open API of HR1069 can also be provided for third party development to realize customization requirements.

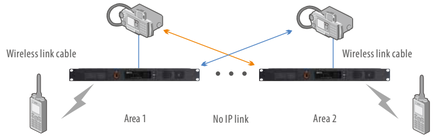
Flexible Interconnection

The HR1069 series repeater is designed as an intelligent communication platform. It is flexible in its ability to connect with a variety of systems to provide seamless communication. Hytera can provide Inter-system Communication connections to SIP Phones and Dispatching systems.



Wireless Link Communication

The wireless link communication is applicable for forests, highway, and other areas where the wired network is difficult to be deployed. With the help of Hytera mobile radios MD785i or HM785 it is possible to establish wireless connections between two systems when there is no IP link.



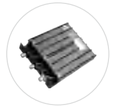
ACCESSORIES

Standard



AC Power Cable
PWC03

Optional



External Duplexer



Back-to-Back Cable
PC49



Backup Cable
POA147



Programming Cable
PC37

SPECIFICATIONS

General	
Frequency Range	UHF: 400-470MHz VHF: 136-174MHz
Channel Capacity	64
Channel Spacing	12.5KHz/ 20KHz/ 25KHz
Operating Voltage	DC: 13.6V±15% AC: 100-240V
Current Consumption(DC)	Standby: ≤0.9A Transmitting: ≤12A
Current Consumption(AC)	Standby: ≤0.35A Transmitting: ≤1.2A
Frequency Stability	≤±0.5ppm
Antenna Impedance	50Ω
Duty Cycle	100%
Dimensions(HxWxD)	44x483x366 mm
Weight	4.9kg
Networking	Conventional Mode

**marked features are coming soon.*

Receiver			
Sensitivity	Analog	0.18μV(12dB SINAD) 0.16μV(Typical)(12dB SINAD)	
	Digital	0.2μV/BER5% 0.18μV(Typical)/BER5%	
Selectivity	TIA-603	65dB@12.5kHz / 75dB@20/25kHz	
	ETSI	60dB@12.5kHz / 70dB@20/25kHz	
Inter-Modulation	TIA-603	75dB@12.5/20/25kHz	
	ETSI	70dB@12.5/20/25kHz	
Spurious Response Rejection	TIA-603	80dB@12.5/20/25kHz	
	ETSI	80dB@12.5/20/25kHz	
Blocking		90dB	
Hum and Noise		40dB@12.5kHz; 43dB@20kHz, 45dB@25kHz	
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 & 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		

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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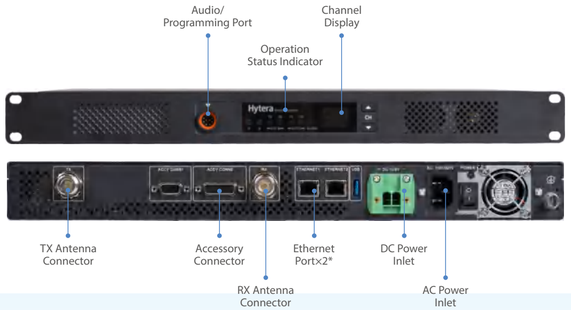
EMPOWER YOUR OPERATION
HR1069
NEXT GENERATION DIGITAL REPEATER



www.hytera.com

EMPOWER YOUR OPERATION

Nowadays, different kinds of challenges come to us, whether in public safety, public utilities or commercial industry, we all have a lot of pressure to handle our day to day tasks. For better safety and efficiency throughout your organization, instant communication is one of the most important requirements. To ensure that your voice and data communication can reach everyone and everywhere, Hytera provides the HR1069 series repeater, which represents the next generation digital repeater, to meet your demands for communication coverage and delivering reliable and high-performance radio network services.



Connectivity to more applications

* Two Ethernet ports and USB port supported in Enhanced version only.



SMOOTH MIGRATION WITH YOUR BUSINESS GROWING

Your communication needs are always growing together with the business expansion. As your business expands your communication needs grow too. As the organisation becomes larger with more employees you will need to upgrade your communication system to increase capacity and ensure continued working efficiency.

The HR1069 series repeaters can be compatible with most Hytera system types: Analog and Digital Conventional modes, XPT, Conventional Simulcast and DMR Tier 3 DS-6211. Whether you want to migrate from analog to digital, or switch to a large capacity trunking system, the HR1069 series repeaters can be unlocked by firmware upgrade and a chargeable license. Simple, Smooth, and Cost-effective.

GENERAL HIGHLIGHTS

Economical 1U Structure

The 1U height of the HR1069 series makes it compact, thus reducing space requirements for installation.

AC/DC Auto Switch

The HR1069 series supports both AC and DC input and AC/DC auto switching.

Wide Coverage

The communication range of HR1069 series is extended with enhanced Rx sensitivity. And the Ethernet port enables access to IP networks, which provides the capability for the HR1069 to connect everyone and everywhere.

Analog & Digital Auto Switch

The HR1069 series can support mixed channel mode to detect the receiving signal, then automatically switch between analog and digital mode. This offers an easy way to migrate to digital from analog.

ENHANCED VERSION HIGHLIGHTS

The HR1069 series repeater offers standard version and an enhanced version. Both versions support all the general features, while the Enhanced version adopts a built-in co-processor board to enable more advanced features. This offers more options for users to choose according to their actual needs.

**The standard version can be easily upgraded to enhanced version with an add-on co-processor module board.*

Outstanding Performance

The enhanced version of HR1069 adopts an add-on quad-core 1.6GHz co-processor and 2G RAM for fast processing speed, which can process the services faster and integrate more applications.

Convenient Management

In the enhanced version a web-based back end platform has been designed to simplify repeater management. Configuration, upgrade and real-time diagnosis can all be completed through a web browser, which is ideal for remote management.