

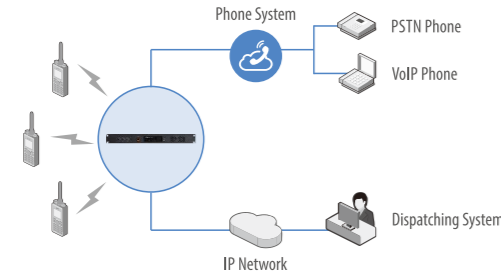
GENERAL SOLUTIONS

Hytera offers a wide range of solutions to enrich functionality for the HR106X series repeater. Dispatching system, a back-to-back solution for cross-band communication. Additionally the open API of HR106X can also be provided for third party development to realize customization requirements.



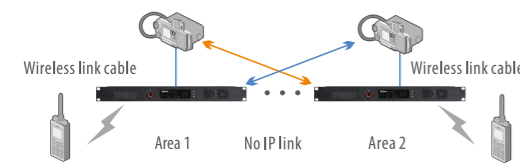
Flexible Interconnection

The HR106X 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. It can provide wireless connection between two systems when there is no IP link.



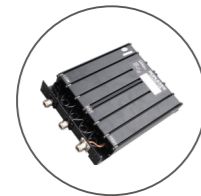
ACCESSOIRES

Standard



AC Power Cable

Optional



External Duplexer



Back-to-Back Cable



Backup Cable



Programming Cable

SPECIFICATIONS

General	Frequency Range	UHF1: 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	8.0kg
	Networking	Conventional Mode *Digital Trunking Lite; *Simulcast

*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%
	Adjacent Channel Selectivity	TIA-603	65dB @ 12.5kHz; 75dB @ 20/25kHz
		ETSI	60dB @ 12.5kHz; 70dB @ 20/25kHz
	Intermodulation	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; 12.5kHzData & 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 @ 12.5/20kHz; 70dB @ 25kHz		
Audio Response	+1~-3dB			
Audio Distortion	≤3%			
Digital Vocoder Type	AMBE+2™			

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.

Notes: HR106X, MD78X(G), PD78X(G), PD70X(G); X=0, 2, 5, 6 or 8, model number varies geographically. For details, please contact our regional sales representatives.



HR106X

Next Generation Digital Repeater

- Economical 1U Structure
- Outstanding Performance
- Reliable Communication
- Flexible Interconnection
- Auto Switch between AC&DC



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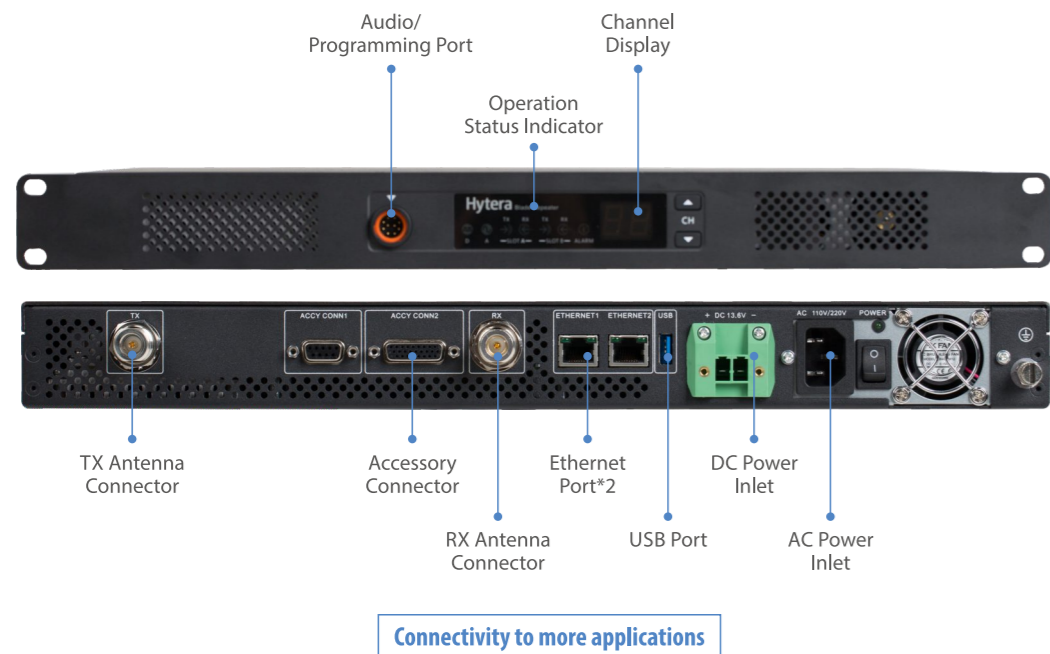
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OVERVIEW

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 HR106X 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.



GENERAL HIGHLIGHTS



Economical 1U Structure

The 1U height of the HR106X series makes it compact, thus reducing space requirements for installation.



Wide Coverage

The communication range of HR106X series is extended with enhanced Rx sensitivity. And the Ethernet port enables access to IP networks, which provides the capability for the HR106X to connect everyone and everywhere.



AC/DC Auto Switch

The HR106X series support both AC and DC input and to enable AC/DC auto switching.



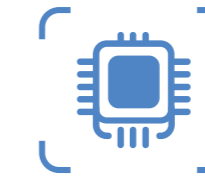
Analog & Digital Auto Switch

The HR106X 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 HR106X series repeater offers a standard version and an enhanced version. Both of them can support all the general features, and 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 smooth upgraded to enhanced version with an add-on co-processor module board.*



Outstanding Performance

The enhanced version of HR106X adopts a 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.



Highly Integration

The enhanced version of HR106X is integrated with router and SIP gateway features. Less devices and simplified management. It offers a cost-effective solution for your network construction.



Convenient Management

A new web-based backend platform has been designed to simplify repeater management. Configuration, upgrade and real-time diagnosis can all be completed through a web browser, ideal for remote management.



High Security

The enhanced version of HR106X also adopts SNMP3.0 technology to enhance communication security. All your data is fully protected during the communication.

SMOOTH MIGRATION WITH YOUR BUSINESS GROWING

Your communication needs are always growing together with the business expansion. As the organization becomes larger and larger with more and more employees, you are looking forward to upgrading for your communication system, increasing capacity, and deploying more sites to ensure your working efficiency.

The HR106X series repeaters can be compatible with most Hytera system types: Analog and Digital Conventional Mode, Digital Simulcast System, Digital Trunking Lite. Whether you want to migrate from analog to digital, or switch to a large capacity trunking system, the HR106X series repeaters can be unlocked with a chargeable license. Simple, Smooth, and Cost-effective.

