Ultra-thin Full Power Keypad Digital Portable Radio

X1p

Hytera X1p, ultra-thin full power keypad digital portable radio, fully complies with ETSI open standard. The radio is a perfect combination of structural rigidity, versatile functionalities and refined design. It supports AES encryption algorithm and 256-digit dynamic encryption keys for secure communication, rich connectives like BT and USB port for more applications, and IP67 for safe operations in severe environments.

All comes with a surprisingly small size: 21mm (1100mAh Li-ion battery) thin.

X1p

DMR
DIGITAL MOBILE RADIO ASSOCIATION

Innovative Design

① **Ease of use**

The radio is as thin as 21mm and can work with wireless headsets, collar microphone, palm controller and flexible antenna.

② **Ip67 compliance**

The radio complies with IP67 requirements and can withstand up to 1m submersion for 30 minutes.

③ **Rugged & reliable**

The radio complies with MIL-STD-810 C/D/E/F/G standards and passes HALT (Highly Accelerated Life Test).

④ **Large-size colour display**

The 1.8" TFT LCD display is visible even under outdoor strong sunlight.

Hytera X1p

Features

Advanced encryption

The radio supports AES encryption algorithm and 256-digit dynamic encryption keys to secure communication.

BT accessories

The radio can work with Hytera BT accessories, such as EHW02 dual-PTT BT earpiece, POA47 BT ring PTT etc.

Open USB interface

The third party can develop applications via the open USP interface.

GPS positioning

The built-in GPS module supports GIS applications.

Dual mode (analog & digital)

The radio can operate in analog mode and digital mode for a smooth analog-to-digital migration.

Versatile voice calls

The radio can transmit or receive private call, group call, all call, emergency call etc.

Vibration

The radio can vibrate when receiving a call or message.

Rich signaling

The radio can transmit various analog signals, including HDC1200, 2-tone and 5-tone, for better communication with analog users.

Software upgradable

New features can be enabled via software upgrade. Moreover, X1p(UL913) can switch between MPT and DMR trunking modes through license.

Work with Hytera dispatch system and portable repeater
to achieve flexible networking & dispatching

For mission critical users like special police, anti-drug/anti-smuggling officer, senior guard, senior executives, etc.. when a professional radio is insufficient to accomplish the tasks required and ensure safety this is where a complete communications solution is demanded.

Hytera dispatch system

A digital dispatching system developed on the Hytera digital platform in compliance to ETSI DMR open standard, is designed for efficient communication, management and dispatching of professional users.
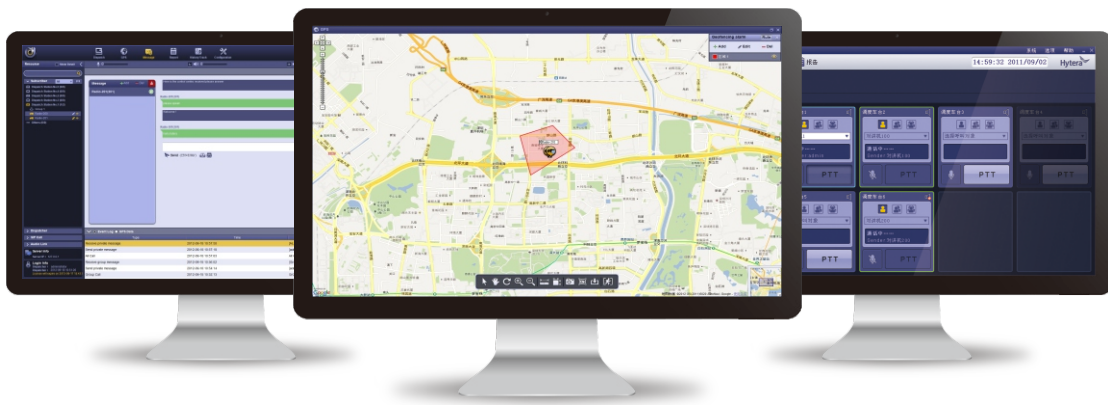
- **All types of voice calls**

  Hytera dispatch system can transmit and receive all type of calls, including private call, group call and all call.

- **Voice recording & playback**

  All incoming calls and outgoing calls will be recorded in Hytera dispatch system server. This includes all types of DMR voice calls and PSTN interconnected calls. Users can retrieve recorded voice and plackback at any time. All recorded voices are easily can be searched through time, caller ID or callee ID.

- **Radio kill & radio revive**

  Hytera dispatch system is able to kill a radio remotely when the radio is under illegal use or has been stolen. The killed radio is able to power on but unable to transmit or receive. Hytera dispatch system is also able to activate a killed radio when necessary.

- **Real-time tracking**

  Hytera dispatch system can track and display radio locations in real-time on the map. During critical missions, the dispatcher can send staff nearby to check and help when any accident occur.

Versatile accessories for specific tasks

EAN21

3-wire Surveillance Earpiece with Transparent Acoustic Tube(Beige)

POA47

BT Ring PTT

EHN21

Remote C-Earset

EHW02

Wireless Earpiece With Dual-PTT

EWN07

Digital Wireless Covert Earpiece With in-Line Controller (Neckloop Sensor)

NiTi Antennna

EWN08

Digital Wireless Covert Earpiece (Flatpack Sensor)

PCN005

Blet Clip

Hytera X1p

Hytera offers a complete series of accessories for X1p, including audio accessory, battery, portable accessory etc.

NCN009

Vest

CH10L16

MCU dual-pocket charger

BL1401

1400mAh Li-ion battery

CH04L01

Belt Charger

Pictures above are for reference only and may vary from actual products.

Accessories

Li-ion Battery 1100mAh	BL1103	Wireless Earpiece With Dual-PTT	EHW02
Li-ion Battery 1400mAh	BL1401	BT Ring PTT	POA47
Li-ion Battery 1800mAh	BL1809	Belt Charger	CH04L01
Switching Power(US-standard) 12V 1A	PS1014	Blet Clip	PCN005
MCU Dual Charger	CH10L16	Digital Wireless Covert Earpiece	EWN07
3-wire Surveillance Earpiece with Transparent Acoustic Tube (Beige)	EAN21	With in-Line Controller (Neckloop Sensor)	
		Digital Wireless Covert Earpiece (Flatpack Sensor)	EWN08
Remote C-Earset	EHN21	Detachable Earpiece with Transparent Acoustic Tube	EAN22
Remote Swivel Earset	EHN20	3-wire Dual-PTT Surveillance Earpiece with Transparent Acoustic Tube (Beige)	EAN19
Remote Earbud	ESN14		
Vest	NCN009	NiTi Antenna	

High-capacity Battery & Belt Charger:

Bl1809, Li-ion Battery 1800mAh; CH04L01, Belt Charger. A large capacity battery is the best choice if you require long-time operation. The 1800mAh Li-ion enables X1p to work up to 15 hours and the belt charger further extends its operation time.

Audio Accessories

EWN08, Wireless Earphone; EHW02, BT earpiece; POA47, BT Ring PTT. X1p has a variety of audio accessories for flexible use in actual environments.

Target Customers

Mission critical users:
special police, anti-drug/anti-smuggling officer, senior guard,
senior executives.

Specifications

General		
Frequency Range	UHF1: 400-470MHz; UHF2:450-520MHz; UHF3: 350-400MHz UHF5: 806-941MHz; VHF: 136-174MHz	
Channel Capacity	1024	
Zone Capacity	64	
Channel Spacing	25/20/12.5kHz	
Operating Voltage	7.4V (rated)	
Battery	1100mAh (Li-Ion) 1400mAh (Li-Ion) 1800mAh (Li-Ion)	
Battery Life (5-5-90 Duty Cycle, High TX Power)	Digital: 10 Hours @1100mAh 12 Hours @1400mAh 15 Hours @1800mAh	Analog: 7 Hours @1100mAh 9 Hours @1400mAh 12 Hours @1800mAh
Frequency Stability	±1.5ppm	
Antenna Impedance	50Ω	
Dimensions (H×W×D) (with battery, without antenna)	120 x 57 x 21mm (1100mAh Li-ion battery) 120 x 57 x 23mm (1400mAh Li-ion battery) 120 x 57 x 26mm (1800mAh Li-ion battery)	
Weight	252g (1100mAh Li-ion battery) 265g (1400mAh Li-ion battery) 287g (1800mAh Li-ion battery)	
LCD Display	160 x 128 pixels, 65536 colors 1.8 inch, 6 rows	

Receiver		
Sensitivity	Analog	0.3 µV (12dB SINAD) 0.22 µV (Typical) (12dB SINAD) 0.4 µV (20dB SINAD)
	Digital	0.3 µV / BER5%
Selectivity TIA-603 ETSI		60dB @ 12.5kHz / 70dB @ 20&25kHz 60dB @ 12.5kHz / 70dB @ 20&25kHz
Intermodulation TIA-603 ETSI		70dB @ 12.5/20/25kHz 65dB @ 12.5/20/25kHz
Spurious Response Rejection TIA-603 ETSI		70dB @ 12.5/20/25kHz 70dB @ 12.5/20/25kHz
Hum and Noise		40dB @ 12.5kHz 43dB @ 20kHz; 45dB @ 25kHz
Rated Audio Distortion		≤3%
Audio Response		+1 ~ -3dB
Conducted Spurious Emission		< -57dBm

Transmitter		
RF Power Output	UHF1/UHF2: 1W/4W UHF5: 1W/3W (806-870MHz) UHF5: 1W/2.5W（896-941MHz） VHF1: 1W/5W	
FM Modulation	11K0F3E @ 12.5kHz 14K0F3E @ 20kHz 16K0F3E @ 25kHz	
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data & Voice: 7K60FXW	
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™ or SELP	
Digital Protocol	ETSI-TS102 361-1, 2&3	

Environmental Specifications		
Operating Temperature	-30℃ ~ +60℃	
Storage Temperature	-40℃ ~ +85℃	
ESD	IEC 61000-4-2（level 4） ±8kV (contact) ±15kV (air)	
American Military Standard	MIL-STD-810 C/D/E/F/G	
Dust & Water Protection	IP67	
Humidity	Per MIL-STD-810 C/D/E/F/G	
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G	

GPS		
TTFF(Time To First Fix) Cold Start	<1 minute	
TTFF(Time To First Fix) Hot Start	<10 seconds	
Horizontal Accuracy (5 satellites visible at nominal -130dBm)	<5m (50% probable) <10m (95% probable)	

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