Target Customers

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

Specifications

General		
Frequency Range(MHz)	136-174MHz 400-470MHz 350-400MHz	
Channel Capacity	32	
Channel Spacing	25/20/12.5KHz	
Operating Voltage	7.4V (rated)	
Battery	1100mAh (Li-Ion)	
Battery Life (5-5-90 Duty Cycle, High TX Power)	Analog: Above 8 Hours Digital: Above 10 Hours	
Frequency Stability	±0.5ppm	
Antenna Impedance	50Ω	
Dimensions (H×W×D) (with standard battery, without antenna)	119.5 X 57 X 18mm	
Weight	200g	
Front Case	PC & Mental frame	

Receiver		
Sensitivity	Analog	0.3IV (12dB SINAD) 0.22IV (Typical) (12dB SINAD) 0.4IV (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	
S/N	40dB @ 12.5KHz 43dB @ 20KHz: 45dB @ 25KHz	
Rated Audio Distortion	≤3%	
Audio Response	+1 ~ -3dB	
Conducted Spurious Emission	< -57dBm	

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

Transmitter		
RF Power Output	VHF High Power: 5W VHF Low Power: 1W UHF1/UHF3 High Power: 4W UHF1/UHF3 Low Power: 1W	
FM Modulation	11K ΦF3E @ 12.5KHz 14K ΦF3E @ 20KHz 16K ΦF3E @ 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++ 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 Intrusion	IP67 Standard	
Humidity	Per MIL-STD-810 C/D/E/F/G Standard	
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard	

GPS		
TTFF(Time To First Fix) Cold Start	<1 minute	
TTFF(Time To First Fix) Hot Start	<10 seconds	
Horizontal Accuracy	<10 meters	

The world's thinnest & smallest digital covert radio

X1e

Hytera X1e Covert Radio, fully compliant to DMR open standard of ETSI, emerges as the world's smallest DMR radio. Perfect combination of structural rigidity, versatile functionalities, and refined design: secure communication ensured by AES encryption algorithm & 256 digits dynamic encryption key: convenient application development facilitated by built-in Bluetooth and USB port: and worry-free handling achieved by IP67 protection.

All comes with a surprisingly small size: 18mm thin.

Hytera X1e

www.hytera.com

Innovative Design

⊙ **Ease of use**
Easy to use with the rugged body as thin as 18mm, professional wireless headsets or collar microphone*, palm controller and flexible antenna.

⊙ **IP67 compliance**
Comply with IP67 requirements, withstanding one-meter submersion up to 30 minutes.

⊙ **Rugged & reliable**
Comply with MIL-STD-810 C/D/E/F/G standards and passing of HALT (Highly Accelerated LifeTest) .

Features

▦ **Advanced encryption**
AES encryption algorithm & 256 digits dynamic encryption key ensures secure communication.

Support Bluetooth
The radio supports Bluetooth port to provide a powerful wireless platform for application development.

Open USB interface
Open USB port facilitates secondary and application development.

GPS positioning
The built-in GPS module supports GIS applications.

Dual modes (analog & digital)
Dual modes (analog & digital) operation ensures a smooth analog-to-digital migration.

Versatile voice calls
Versatile voice calls include individual call, group call and all-call.

Vibration:
Vibration alerts the reception of voice call and message.

Rich signaling
Support multiple advanced analog signaling, including HDC1200, DTMF, 2-Tone and 5-Tone, providing more expansion capacity.

Software upgradable
Upgradable software enables new features without buying a new radio.

Hytera X1e

Work with *SmartDispatch* dispatcher system and
Portable repeater to achieve flexible networking & dispatching

For mission critical users like special police, anti-drug/anti-smuggling officer, senior guard, etc., only a convert terminal is not enough to accomplish tasks and ensure safety. This is where a complete communications solution demanded.
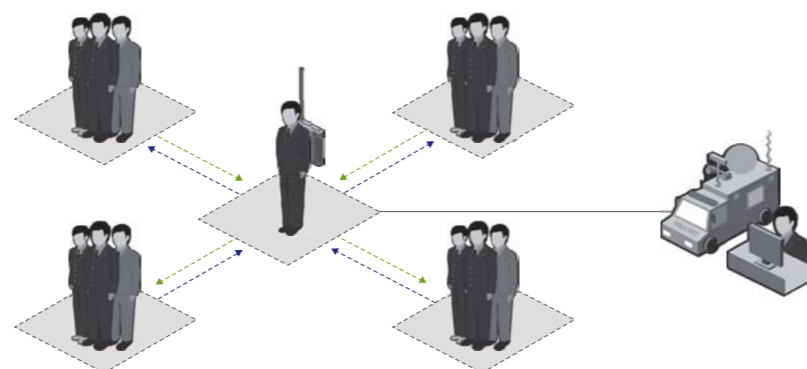
SmartDispatch

A digital dispatching system developed on Hytera digital platform compliance to ETSI DMR open standard, is designed for efficient communication, management and dispatching of professional users.

• **All types of voice calls**
SmartDispatch supports all types of calls that meet your various dispatching operation needs, include private call, group call, all call. Every *SmartDispatch* dispatcher client console is able to dispatch up to 8 voice dispatching channels. Through these dispatching channels, *SmartDispatch* could receive all types of calls as well as trigger any type of call through user friendly and easy to operate user interface.

• **Voice recording & playback**
All incoming calls and outgoing calls will be recorded in *SmartDispatch* server. This includes all types of DMR voice calls and PSTN interconnected calls. Users can retrieve recorded voice and playing back at any time so that important conversation is not missed. All recorded voices are easily can be searched through time, caller ID or callee ID.

• **Radio kill & radio revive**
SmartDispatch is able to kill a radio unit remotely when the radio unit is under illegal usage or being stolen. The killed radio is able to power on but not able to perform transmitting or receiving. *SmartDispatch* is also able to activate a killed radio when necessary.

• **Real-time tracking**
This feature allows *SmartDispatch* to track the location of any radio units in real-time. Users have an option to display the location route on the mapping. On critical missions, the dispatcher can send staff nearby for check and help when the route of a patroller halted.

Portable repeater for flexible networking

Take the portable repeater to extend coverage area, allow flexible networking and high mobility in tasks, which is especially helpful in tracking, body guarding and mobile dispatching.

Portable repeater

Learn more about *SmartDispatch* and the backpack repeater, please visit www.hytera.com or contact our local dealers and sales representatives.

Versatile accessories for specific tasks

EWN07

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

Bluetooth Earphone (coming soon)

CH04L01

Belt Charger

EAN19

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

Hytera X1e

Hytera offers a complete series of accessories for X1e covert radio, including audio accessory, battery, portable accessory, etc., which further enhances the performance of X1e.

Antenna

CH10L15

MCU dual-pocket charger

BL1103

1100mAh Li-ion battery

Vest

Flexible Antenna (coming soon)

Standard Accessories

Li-ion Battery 1100mAh	BL1103
Switching Power(US-standard) 12V 1A	PS1014
MCU Dual Charger	CH10L15
3-wire Dual-PTT Surveillance Earpiece with Transparent Acoustic Tube (Beige)	EAN19
Vest	

Optional Accessories

High-capacity Battery & Belt Charger:
For users require long-time operation, a high-capacity battery with belt charger is undoubtedly the best match. The 1800mAh Li-ion battery of X1e enables it to work for up to 14 hours, and the belt charger further extends its operation time with convenient charging.

Li-ion Battery 1800mAh	BL1809
Belt Charger	CH04L01

Audio Accessories
Both wireless earphone and, Bluetooth earphone are available for X1e.

Wireless Earphone	EWN07
Bluetooth Earphone	