

Introducing the world's  
**thinnest & smallest digital covert radio:**

**X1<sub>e</sub>**

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; convenient application development facilitated by USB port; and worry-free handling achieved by IP57 protection.

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



Hytera X1e

## 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.
- Full RF power:**  
4W (UHF) / 5W (VHF)
- IP57:**  
one-meter submersion up to 30 minutes.
- Durability:**  
passing of HALT (Highly Accelerated Life Test) and MIL-STD-810 C/D/E/F compliance.

\*More accessories, coming soon.

## Other features

- 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 call:**  
Versatile voice calls include individual call, group call and al-call.
- Vibration:**  
Vibration alerts the reception of voice call and message.
- IP service:**  
Multiple IP functionalities are allowed when connected with a PC via IP address.
- Various analog signaling types:**  
Multiple advanced analog signaling, including HDC1200, DTMF, 2-Tone and 5-Tone, provides more expansion capacity.
- Software upgradable:**  
Upgradable software enables new features without buying a new radio.

## Specifications

General	Frequency Range(MHz)	VHF: 136-174MHz UHF1: 400-470MHz UHF3: 350-400MHz	
	Channel Capacity	16	
	Channel Spacing	25/20/12.5 KHz	
	Operating Voltage	7.4V (rated)	
	Battery	1150mAh (Li-Ion)	
	Battery Life(5-5-90 Duty Cycle, High TX Power)High-capacity 2000mAh Li-Ion Battery	Analog: Above 8 Hours Digital: Above 10 Hours	
	Frequency Stability	± 1.5ppm	
	Antenna Impedance	50 Ω	
	Dimensions (H×W×D) (with standard battery, without antenna)	119.5 X 57 X 18 mm	
	Weight	200g	
Front Case	PC & Metal frame		
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 Φ F3E @ 12.5 kHz 14K Φ F3E @ 20 kHz 16K Φ F3E @ 25 kHz	
	4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data & Voice: 7K60FXW	
	Conducted/Radiated Emission	36dBm<1GHz 30dBm>1GHz	
	Modulation Limiting	± 2.5kHz @ 12.5 kHz ± 4.0kHz @ 20 kHz ± 5.0kHz @ 25 kHz	
	FM Noise	40dB @ 12.5 kHz 43dB @ 20kHz 45dB @ 25 kHz	
	Adjacent Channel Power	60dB @ 12.5 kHz 70dB @ 20/25 kHz	
	Audio Response	+1 ~ -3dB	
	Audio Distortion	≤ 3%	
	Digital Vocoder Type	AMBE++ or SELP	
Digital Protocol	ETSI-TS102 361-1, 2&3		
Receiver	Sensitivity	Analog	0.3 V (12dB SINAD) 0.22 V (Typical) (12dB SINAD) 0.4 V (20dB SINAD)
		Digital	0.3 μ V /BERS%
	Selectivity TIA-603 ETSI	60dB @ 12.5 kHz / 70dB @ 20&25 kHz 60dB @ 12.5 kHz / 70dB @ 20&25 kHz	
	Intermodulation TIA-603 ETSI	70dB @ 12.5/20/25 kHz 65dB @ 12.5/20/25 kHz	
	Spurious Response Rejection TIA-603 ETSI	70dB @ 12.5/20/25 kHz 70dB @ 12.5/20/25 kHz	
	S/N	40dB @ 12.5 kHz 43dB @ 20KHz 45dB @ 25 kHz	
	Rated Audio Power Output	0.5W	
	Rated Audio Distortion	≤ 3%	
	Audio Response	+1 ~ -3dB	
	Conducted Spurious Emission	< -57 dBm	
Environmental Specifications	Operating Temperature	-30°C ~ +60°C	
	Storage Temperature	-40°C ~ +85°C	
	ESD	IEC 61000-4-2 (level 4) ± 8kV (contact) ± 15kV (air)	
	American Military Standard	MIL-STD-810 C/D/E/F	
	Dust & Water Intrusion	IP57 Standard	
	Humidity	Per MIL-STD-810 C/D/E/F Standard	
	Shock & Vibration	Per MIL-STD-810 C/D/E/F Standard	
	GPS	TTFF (Time To First Fix) Cold Start	< 1 minute
		TTFF (Time To First Fix) Hot Start	< 10 seconds
		Horizontal Accuracy	< 10 meters



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