

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



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 IP67 protection.

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



Hytera X1e

## **Innovative Design**

① 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.

- ② Full RF power:4W (UHF) / 5W (VHF)
- ③ IP67: one-meter submersion up to 30 minutes.
- Durability: passing of HALT (Highly Accelerated LifeTest) and MIL-STD-810 C/D/E/F/G 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

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	Frequency Range(MHz)		VHF: 136-174MHz UHF1: 400-470MHz UHF3: 350-400MHz
	Channel Capacity		32
	Channel Spacing		25/20/12.5KHz
	Operating Voltage		7.4V (rated)
	Battery		1100mAh (Li-Ion)
			TroomArr(Erion)
	Battery Life (5-5-90 Duty Cycle, High TX Power)		Analog: Above 8 Hours Digital: Above 10 Hours
	Frequency Stability		±0.5ppm
	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 & Mental frame
	RF Power Output		VHF High Power: 5W VHF Low Power: 1W UHF1/UHF3 High Power: 4W UHF1/UHF3 Low Power: 1W
	FM Modulation		11КФF3E @ 12.5КНz 14КФF3E @ 20КНz 16КФF3E @ 25КНz
	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
	Sensitivity	Analog	0.3iV (12dB SINAD) 0.22iV (Typical) (12dB SINAD) 0.4iV (20dB SINAD)
	✓ Digital		0.3 μ V /BER5%
	Selectivity		
	TIA-603		60dB @ 12.5KHz / 70dB @ 20 & 25KHz 60dB @ 12.5KHz / 70dB @ 20 & 25KHz
	ETSI 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 70dB @ 12.5/20/25KHz
	S/N		40dB @ 12.5KHz 43dB @ 20KHz 45dB @ 25KHz
	Rated Audio Power Output		0.5W
	Rated Audio Distortion		≤3%
	Audio Response		+1 ~ -3dB
Environmental Specifications	Conducted Spurious Emission		< -57dBm
	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/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
	TTFF (Time To First Fix) Cold Start		<1 minute
GPS	TTFF (Time To First Fix) Hot Start		<10 seconds
	Horizontal Accuracy		<10 seconds
			< 10 HIGGIS



### Hytera Respond & Achieve

Hytera

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