Hytera
Respond & Achieve

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

X1

Hytera X1 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.

DMR

Hytera X1

For more information, Please visit http://www.hytera.com

To purchase, become a dealer or application partner, please contact us dmr.marketing@hytera.cn

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 to30 minutes.

④ **Durability:**
passing of HALT (Highly Accelerated Life Test) and MIL-STD-810 C/D/E/F compliance.

*More accessories, coming soon.

Other features

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

Built-in Bluetooth:
The built-in Bluetooth port provides a powerful wireless platform for accessory 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 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	50Ω
		Dimensions (H×W×D) (with standard battery, without antenna)	119.5 X 57 X 18 mm
		Weight	200g
		Front Case	PC & Mental 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	11KΦF3E @ 12.5 kHz 14KΦF3E @ 20 kHz 16KΦF3E @ 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)
	Sensitivity	Digital	0.3μV /BER5%
		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℃ ~ +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
		Dust & Water Intrusion	IP67 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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