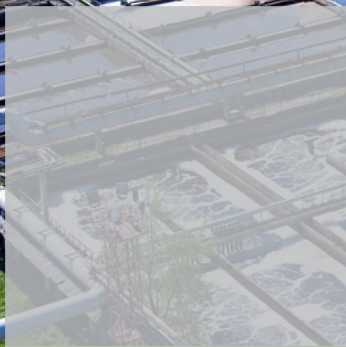




Executive Digital Portable Radio

# X1 SERIES

- Slim Design for User Comfort and Covert Applications
- Built-in GPS, Bluetooth, and Man-Down Features



The X1i Series is built to the DMR Standard and is rich in features for both voice and data communication. The design is approved to rigorous IP67 and MIL-STD 810 testing. The pseudo-trunking maximizes channel usage. Key features such as man down, vibration, a dedicated emergency button, and the large color display make this an ideal solution for mission critical communications. The radio's slim size enables a user to carry it covertly in a pocket or belt clip. The X1i Series also comes standard with a GPS chip that allows the radio to integrate with Hytera SmartDispatch or other 3rd party GPS dispatching software.

## Applications

Security

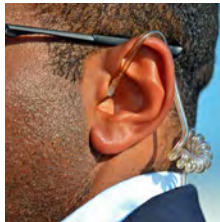
Business

Education

Utilities

Manufacturing

Forestry



# Product Features

- Over-the-air Alias**  
 X1i Series can support sending radio alias over the air when PTT. The radio receives the call can decide to create a new contact or overwrite the old one automatically. It gives a great convenience to the customer to manage the fleet with the correct contact stored in each radio without touching each unit for re-programming.
- Voice with GPS**  
 X1i Series is able to transmit GPS data in the same channel during transmitting voice. This gives the customer an option to upload location information once pushing to talk. It helps to target where the speaker is immediately.
- Secure Communication**  
 Besides the encryption inherent to digital technology, The X1ei and X1pi provide enhanced encryption capabilities (such as 256-bit encryption algorithm). This process includes end-to-end encryption and over-the-air encryption. It has analog scrambling, and digital encryption using Advanced Encryption Standard (AES) and ARCFOUR (ARC4) encryption methodology to both voice and data. (A feature for both DMR conventional and Tier III Trunked operation mode).
- Vibration**  
 Vibration alerts the user of voice calls and text messages.
- Out-of-range Notification in RMO**  
 A radio is always notified when it has left the repeater coverage. The users can realize if they are in the talk range all the time by paying attention to the alert tone.
- Enhanced Quick GPS**  
 Enhanced Quick GPS: Compressed GPS data can be packaged in a single frame to greatly increase the capacity up to 450 units/min, which is tripled in DMR Tier II system. This enhancement improves channel efficiency for data and reduce hardware cost.
- Trunked & Conventional Switch**  
 Trunking & Conventional Switch: By pressing a single button or twisting the channel knob, it enables radios to be switched between DMR Tier 3 trunking and conventional mode without restarting. During this process, registration & deregistration in trunking system is done automatically, and over the air authentication is still available.
- Optimized Push-to-talk**  
 Optimized Push-to-talk: It allows a radio to set up audio buffer and store what the user speaks before the call is established. Then it sends the stored audio together with the coming real-time audio after the call is established. Therefore, users can talk right after pressing PTT without waiting for the "go-ahead tone". This feature also enhances the handover function without dropping communications in Tier III system during sites switch.
- OTAP**  
 OTAP for Conventional Repeater System: Over the Air Programming modifies the parameters of remote terminals through the air interface signaling, including digital conventional channel parameters and part parameters of the terminal. It saves time and manpower to operate and maintain a radio system.



## Accessories

### Included

- Li-Ion Battery
- MCU Rapid-rate Charger
- Power Adapter
- Antenna

### Optional



Detachable Earpiece with  
Transparent Acoustic Tube  
EHN22



Carrying Case  
Belt Clip  
PCN005



Programming Cable  
(USB Port)  
PC45



Wireless  
Push To Talk  
POA47

See website for full list

# Specific tions

General	Frequency Range	VHF: 136 - 174MHz; UHF1: 400 - 470MHz UHF2: 450-520MHz; UHF3: 350 - 400MHz UHF5: 806-941MHz (only for DMR Trunking)	
	Channel Capacity	X1ei	48
		X1p	1024
	Zone Capacity (each with a maximum of 16 channels)	X1e	3
		X1p	64
	Channel Spacing	25 / 20 / 12.5KHz	
	Operating Voltage	7.4V (rated)	
	Battery	1800mAh (Li-Ion)	
	Battery Life (5-5-90 Duty Cycle, High TX Power)	Analog	Approx. 11hrs
		Digital	Approx. 15hrs
	Frequency Stability	± 0.5ppm	
	Antenna Impedance	50 Ω	
	Dimensions (HxWxD)	X1e	4.7 x 2.24 x 1.02 inches
		X1p	4.7 x 2.24 x 0.91 inches
Weight	X1e	9.17 oz	
	X1p	9.88 oz	
LCD (X1p)	160 x 128 pixels, 65536 colors, 1.8in, 4 rows		
FCC ID	See website for full list		
Industry Canada ID	See website for full list		

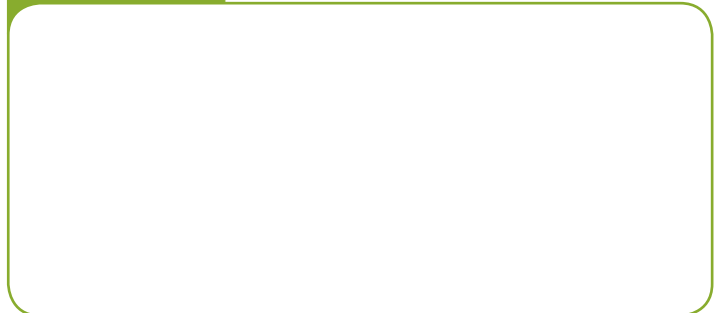
Environmental Specs	Operating Temperature	-22° F ~ +140° F
	Storage Temperature	-40° F ~ +185° F
	ESD	IEC 61000 - 4 - 2 (level 4) ± 8kV(contact); ± 15kV (air)
	American Military Standard	MIL-STD-810 C/D/E/F/G
	Dust & Water Intrusion	IP67 Standard
	Humidity	Per MIL-STD-810 C/D/E/F/G Standard
	Shock & 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

Transmitter	RF Power Output	VHF: Low 1W - High 5W; UHF1,2,3: Low 1W - High 4W; UHF5: Low 1W - High 3W
	FM Modulation (Analog Emissions Designator)	11K φF3E @ 12.5KHz; 14KφF3E @ 20KHz; 16KφF3E @ 25KHz
	4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7K6φFXD 12.5KHz Data & Voice: 7K6φFXW
	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™
Digital Protocol	ETSI-TS102 361-1, 2&3	

Receiver	Sensitivity	Analog	0.3 μ V (12dB SINAD); 0.22 μ V (Typical) (12dB SINAD); 0.4 μ V (20dB SINAD)
		Digital	0.3 μ V/BER5%
	Selectivity TIA-603 ETSI	60dB @ 12.5KHz / 75dB @ 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	
	Blocking TIA-603 ETSI	80dB 84dB	
	S/N	40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz	
	Rated Audio Power Output	0.5W	
	Rated Audio Distortion	≤ 3%	
	Audio Response	+1 ~ -3dB	
Conducted Spurious Emission	< -57dBm		

## Your Local Dealer



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