



PD70X/70XG

Versatile Digital Portable Two-Way Radio

- Superior Digital Voice
- IP67 Rating





PD70X/70XG

Higher Efficiency,
Richer Experience

As a product built to the DMR standard, PD70X/70XG (PD70XG is the model with GPS) is endowed with ergonomic design, all-round digital functions and remarkable quality. These features improve your experience and enable you to be responsive to emergent situations.

Applications

Public Safety
Forest Industry

Public Utility
Business

Transportation (port, airport, railway, etc.)
Manufacturing



Product Highlights

● Ergonomic Design

The globally patented industrial and antenna design ensure convenient operation and remarkable GPS performance.

● Reliable Quality

PD70X/70XG is strictly compliant with MIL-STD-810 C/D/E/F/G and IP67 standards, ensuring outstanding performance even in harsh environments.

● Superior Voice

With narrowband codec and digital error-correction technologies, PD70X/70XG delivers superior voice under noisy environments. The AGC technology maintains a suitable voice volume, and the built-in 1W speaker further ensures clear and crisp voice.

● Durable Battery

Compared with an analog radio, PD70X/70XG can obtain an extra 40% operation time.

● Dual-slot Pseudo Trunk

The free slot can be allocated to enhance frequency efficiency and timely response under emergency.

● Secure Communication

PD70X/70XG provides advanced encryption (such as 256-bit encryption algorithm) and scrambler features to secure communication.

● Versatile Services

In addition to voice services, PD70X/70XG offers data services and selectable features, such as Text Message, Scan, Emergency, Man Down (optional), Vibration, Auto Registration, High-speed Data Transmission, Lone Worker etc.

● Secondary Development

The third party partner can develop applications via accessory port to extend radio functionality.

● Option Board Interface

PD70X/70XG supports option board interface. This allows third party partner to develop various applications to interconnect with the radio. They could control the radio to expand its functionalities including voice recording, encryption etc. Please refer to the API Partner Programmed for more information.

Features

● Dual Modes (Analog+Digital)

PD70X/70XG can operate in either analog or digital mode. It is compatible with the prevalent analog system, ensuring a smooth analog-to-digital transition.

● Versatile Voice Calls

PD70X/70XG supports various voice call types, including Private Call, Group Call, All Call and Emergency Call.

● Various Analog Signaling Types

PD70X/70XG supports various analog signals (HDC1200, DTMF phone, 2-Tone and 5-Tone), various squelch signals (CTCSS/CDCSS), providing higher expansion capacity to the analog system.

● One Touch

PD70X/70XG supports One Touch features to transmit text message, voice calls and supplementary services.

● Scan

PD70X/70XG supports scanning of pure Analog voice and signaling, pure Digital voice and data, and also mix mode scan that comprise of Analog and Digital activities.

● Roaming

PD70X/70XG supports automatic roaming among all sites in a IP Multi-site Connect system.

● Voice and Data Safety

PD70X/70XG supports analog scrambling, and digital encryption using Advanced Encryption Standard (AES) and ARCFOUR (ARC4) encryption methodology to secure both voice and data services.

● Analog/Digital Telephone Interconnect (via DTMF signaling)

PD70X/70XG supports simplex voice communications between radio and telephone users. It allows a radio user to make a telephone call; or a telephone user to make either a Group or Private call to radio users.

● Software Upgradable

New features can be enabled via software upgrade. Moreover, PD70X/70XG can switch to DMR or MPT trunking mode through license.

Standard Accessories

Li-Ion Battery
Power Adapter

MCU Rapid-rate Charger
Belt Clip

Leather Strap
Antenna

Specifications















General	Frequency Range	UHF1: 400-470MHz; UHF3: 350-400MHz; UHF7: 330-400MHz; VHF1: 136-174MHz;	
	Channel Capacity	1024	
	Zone Capacity	16 (each with a maximum of 16 channels)	
	Channel Spacing	12.5kHz / 20kHz / 25kHz	
	Operating Voltage	7.4V (rated)	
	Battery	2000mAh (Li-Ion), 2500mAh (Li-Ion), 3000mAh (Li-Ion)	
	Battery Life (5-5-90 Duty Cycle, High TX Power)	Digital: 20 Hours @2000mAh 24 Hours @2500mAh 28 Hours @3000mAh	Analog: 15.5 Hours @2000mAh 18.5 Hours @2500mAh 21Hours @3000mAh
	Frequency Stability	±0.5ppm	
	Antenna Impedance	50Ω	
	Dimensions (H×W×D) (with standard battery, without antenna)	125 x 55 x 35 mm (2000mAh) 125 x 55 x 40 mm (2500mAh) 125 x 55 x 40 mm (3000mAh)	
Weight (with antenna & standard battery)	335g (2000mAh) 360g (2500mAh) 365g (3000mAh)		
Receiver	Sensitivity	Analog	0.22μV (12dB SINAD) 0.18μV (Typical); (12dB SINAD)
		Digital	0.28μV /BER5%
	Selectivity TIA-603 ETSI	60dB @ 12.5kHz / 70dB @ 20/25kHz 60dB @ 12.5kHz / 70dB @ 20/25kHz	
		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	
		40dB @ 12.5kHz; 43dB @ 20kHz; 45dB @ 25kHz	
	Hum and Noise	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		

Transmitter	RF Power Output	UHF1/UHF3/UHF7: 1W/ 4W VHF1: 1W/ 5W
	FM Modulation	11K0F3E @ 12.5kHz; 14K0F3E @ 20kHz 16K0F3E @ 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+2™
Digital Protocol	ETSI-TS102 361-1,-2,-3	
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/G
	Dust & Water Protection	IP67
	Humidity	Per MIL-STD-810 C/D/E/F/G
	Shock & Vibration	Per MIL-STD-810 C/D/E/F/G

GPS (For PD707G only)	Accuracy specs are for long-term tracking (5 satellites visible at nominal -130dBm)	
	TTFF (Time To First Fix) Cold Start	<1 minute
	TTFF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<5m (50% probable)
<10m (95% probable)		

All specifications are tested according to applicable standards, and subject to change without notice due to continuous development.

Optional Accessories

								
Remote Speaker Microphone (IP57) SM18N2	C-Earset EHN16	Swivel Earset EHN17	Earbud ESN12	3-Wire Surveillance Earpiece with Transparent Acoustic Tube (beige) EAN17	Receive-only Earpiece EAS03	Carrying Case (for thick battery) (leather) (swivel) LCY003	Programming Cable (USB Port) PC38	2500mAh Li-Ion Battery BL2503
								
Battery Optimizing System MCA05	MCU Multi-unit Charger (for Thick Battery) MCA08	3-wire Surveillance Earpiece with Transparent Acoustic Tube(Black) EAN18	2-wire Earpiece with Wireless Earphone and Neck Loop(Beige) EWN09	Receive-only Earpiece ESS10				

Pictures above are for reference only and may vary from actual products.


Hytera Communications Corporation Limited
 Address: Hytera Tower, Hi-Tech Industrial Park North, Beihuan Rd., Nanshan District, Shenzhen, China
 Tel: +86-755-2697 2999 Fax: +86-755-8613 7139 Post: 518057
 Http: //www.hytera.com Stock Code: 002583.SZ



Hytera retains right to change the product design and specification. Should any printing mistake occur, Hytera doesn't bear relevant responsibility. Little difference between real product and product indicated by printing materials will occur by printing reason.

Hytera, SEHURA, teltronic, NORBAT, SINCLAR, HYT are registered trademarks of Hytera