

PD7 Series

Digital Portable Radio





PD7
Series

The PD7 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 Hytera-patented pseudo-trunking maximizes channel usage. Key features such as vibration, a dedicated emergency button, and the large color display make this an ideal solution for mission critical communications. The PD7 Series also comes with an optional GPS chip that allows the radio to integrate with Hytera Dispatch System or other 3rd party GPS dispatching software.

Applications

Public Safety

Utilities Forestry Manufacturing Transportation Security Hospital

Product Features

User Friendly Design

The large-size color display allows good visibility even under extremely strong light. The globally patented industrial design and antenna design ensure convenient operation and remarkable GPS performance.

Rugged & Reliable

Complies with MIL-STD-810 C/D/E/F/G standards. The Ingress Protection reaches IP67 (6: Totally protected against dust; 7: Protected against the effects of immersion up to 1m for 30 minutes). It's the highest IP level for land-based wireless radio application.

Superior Voice

With the adoption of the AGC technology in combination with the application of narrowband codec and digital error correction technologies, The PD7 Series radios are capable of ensuring your voice is clear and crisp even in noisy environments or at the edge of the coverage area.

Higher Spectrum Efficiency, Higher Channel Capacity

The TDMA technology allows twice the channels based on the same spectrum resource. This relieves the stress of increasing shortage in spectrum resource.

Secure Communication

Besides the encryption inherent to digital technology, The PD7 Series radios provide enhanced encryption capabilities (such as 256-bit encryption algorithm). It has analog scrambling, and digital encryption using Advanced Encryption Standard (AES) and ARCFOUR (ARC4) encryption methodology to both voice and data.).

Roaming

Automatic roaming of all sites in an IP Multi-site Connect system.

Vibration alerts the user of voice calls and text messages.

Capable of scanning of pure analog voice and signaling, pure Digital voice and data, and also mix mode scan that comprise of Analog and Digital activities.

Optional

GPS Positioning

The PD782G / PD752G supports viewing of GPS positioning information and sending of GPS text message.

Dual Mode: Analog & Digital

Dual mode (analog & digital) operation ensures a smooth analog to digital migration.

Various Analog Signaling Types

Various analog signaling types (HDC1200, DTMF phone, 2-Tone, and 5-Tone), various squelch control types (CTCSS / CDCSS), thus providing higher function expansion capacity to the analog world.

Versatile Voice Calls

The intelligent signaling of the PD7 Series radios support various voice call types, including Private Call, Group Call, All Call and Emergency Call.

Multifaceted Features

In addition to conventional communication services, the PD7 Series radios are capable of Text Message, Scan, Emergency, Man Down (optional), vibration Auto Registration, High-speed Data Transmission, Lone Worker, Radio Check, Remote Monitor, Call Alert, Radio Enable, and Radio Disable

Software Upgradeable

Upgradeable software enables new features without buying a new radio; The PD7 Series radios can also be switched into DMR trunking modes with corresponding trunking license applied in the same hardware.

Expansion Ports

This allows third parties to develop accessory and applications via front and rear port of the mobile. (Features such as voice recording, encryption).

One Touch Call/Text

Supports One Touch features that comprise of Preprogrammed Text Messages, Voice Calls and Supplementary Features

Pseudo Trunk

This virtual trunking feature allocates a free timeslot for urgent communications. This effectively enhances frequency efficiency and allows you to communicate in a timely manner in emergency situations.

Data Features

The PD782 / PD752 Supports data capabilities of sending Private and Group text messages. It also supports a Third Party to control the radio via Third party API (GPS, Radio Registration Services, Radio Call Control, Telemetry, Data Transfer), via Telemetry control to radio.

Accessories

Included

- · Li-lon Battery
- MCU Rapid-rate Charger
- Power Adapter
- Antenna
- Belt Clip
- Leather Strap



Remote Speaker Microphone (IP57) SM18N2



MCU Multi-Unit Charger (For Thick Battery) MCA08



Programming Cable (USB Port) PC38



Farset Swivel EHN17

Specifications

	Frequency Range (VHF and UHF3 only PD702 / PD782)	UHF2: 450-	VHF: 136 - 174MHz ; UHF1: 400 - 470MHz UHF2: 450-520MHz ; UHF3: 350 - 400MHz UHF5: 806-941MHz (only for DMR Trunking)		
	Channel Capacity	PD702	32		
		PD782 PD762	1024		
	Zone Capacity (each with a maximum of 16 channels)	PD702	3		
		PD782 PD762	64		
	Channel Spacing	25 / 20 / 12.5KHz			
	Operating Voltage	7.4V (rated)			
	Battery	2100mAh (Li-lon)			
<u>ra</u>	Battery Life (5-5-90 Duty Cycle, High TX Power) (Range of hrs depends on Frequency and GPS)	Analog	Approx. 8 - 12hrs		
Genera		Digital	Approx. 11 - 15hrs		
	Frequency Stability	±0.5ppm			
	Antenna Impedance	50 Ω			
	Dimensions (HxWxD)	PD702	4.9 x 2.17 x 1.38 inches		
		PD782 PD762	4.9 x 2.17 x 1.46 inches		
	Weight	PD702	11.82 oz		
		PD782 PD762	12.52 oz		
	LCD Display (PD782 / PD762)	160 128 pixels, 65535 colors 1.8 inch, 4 rows			
	FCC ID	See website for full list			
	Industry Canada ID	See website for full list			
	Operating Temperature	-22° F ~ +140° F			
SOE	Storage Temperature	-40° F∼ +185° F			
Environmental Spec	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			

 $20 \text{KHz}\,/\,25 \text{KHz}$ will not be available on new equipment in the U.S. after January 1^{st} , 2011

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Iransmitter	RF Power Output	VHF: High 5W - Low 1W UHF: High 4W - Low: 1W	
	FM Modulation (Analog Emissions Designator)	11K фF3E @ 12.5KHz ; 14KфF3E @ 20KHz ; 16KфF3E @ 25KHz	
	4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7K6 FXD 12.5KHz Data & Voice: 7K6 FXW	
	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	

Receiver	Sensitivity	Analog	0.22 μ V (12dB SINAD) ; 0.22 μ V (Typical) (12dB SINAD); 0.4 μ V (20dB SINAD)
		Digital	0.22 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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