

# PD6 Series

Rugged Digital Radio



- GPS Option and Integration with Data Applications
- Durable and Feature-Rich in an Innovative, Compact Design





## PD6 Series

The PD6 Series is an open-standard DMR radio rich in features for both voice and data communication in a design approved to rigorous IP67 and MIL-STD 810 testing. It is the ideal solution for organizations looking for an affordable migration from analog to digital technology. The Hytera-patented pseudo-trunking maximizes channel usage. The PD6 Series G 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

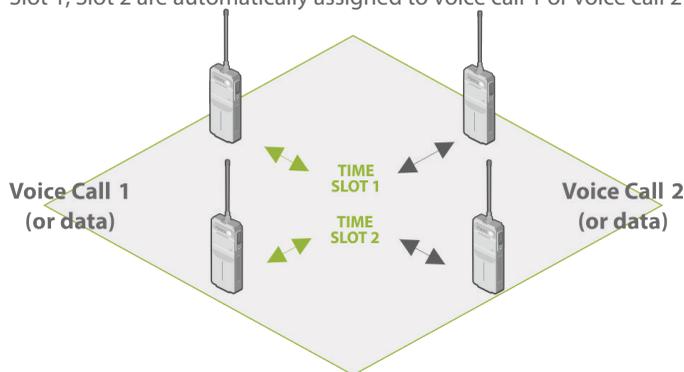
Construction   Education   Hospital   Hotel   Security   Factories   Farming   Forestry



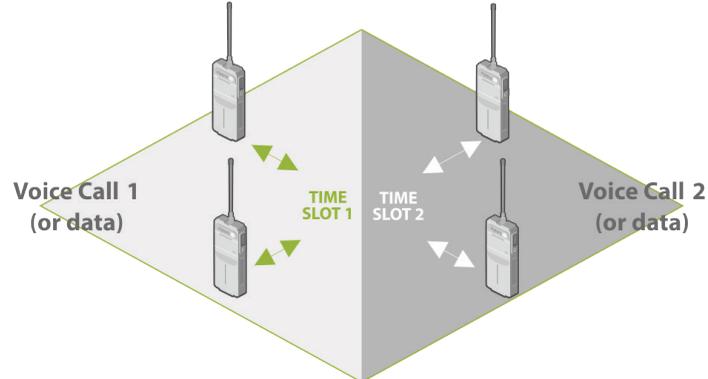
# Product Features

- Smaller, Sleeker, Lighter**  
 The PD6 Series has a light weight PC & Metal frame design. P602 is 4.7 x 2.13 x 1.1 inches weighing 10.23oz, PD662 / PD682 is 4.8 x 2.17 x 1.1 inches weighing 10.93oz.
- Rugged & Reliable**  
 Complies with MIL-STD-810 C/D/E/F/G standards and passes HALT (Highly Accelerated Life Test).
- Wider Available Frequency Range**  
 Expanded frequency range of 400-527MHz.
- Dual Mode: Analog & Digital**  
 Dual mode (analog & digital) operation ensures a smooth analog to digital migration.
- Secure Communication**  
 Allows basic/advanced digital encryption and Scrambler feature in analog mode.
- Advanced Signaling**  
 Supports multiple advanced analog signaling modes, including DTMF Encode (PD682), HDC1200, 2-Tone and 5-Tone, providing better integration into existing analog radio fleets.
- DMRA Data Service**  
 The data protocol is fully compliant to DMRA standard.
- 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. See example below.
- GPS Positioning (Factory Option)**  
 The built-in GPS module in the PD6 series G supports GIS applications.
- Man Down (Factory Option)**  
 When a user falls down, the radio can automatically alert others.
- Further Development Port**  
 The reserved side port allows users or any third party partner to further develop other helpful applications to extend radio functionalities.
- One Touch Call/Text**  
 Supports One Touch features that comprise of Preprogrammed Text Messages, Voice Calls and Supplementary Features.
- Supplementary Features**  
 PD6 Series can decode radio enable, radio disable, and remoter monitor as well as Priority Interrupt.
- Radio Priority-Based Interruption (Factory Option)**  
 Enables an administration or manager radio to interrupt calls for emergency or urgent communication.
- IP67 Protection**  
 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.
- DMO True 2-Slot / DMRA Direct Mode**  
 In Directmode Hytera can provide 2-slot communication, which allows for 2 talk paths on 1 frequency. See example below.

Slot 1, Slot 2 are automatically assigned to voice call 1 or voice call 2



Slot 1 is used for voice call, Slot 2 is used for voice call 2



# Accessories

## Included

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

## Optional

See website for full list



Detachable Earpiece with Transparent Acoustic Tube  
EHN22



MCU Multi-Unit Charger (for Thick Battery)  
MCA08



Programming Cable (USB Port)  
PC45



Battery 2000mAh (Li-Ion)  
BL2010

# Specifications

General	Frequency Range	VHF: 136 - 174MHz UHF: 400 - 527MHz	
	Channel Capacity	PD602	48
		PD662 PD682	1024
	Zone Capacity	PD602	3
		PD662 PD682	64
	Channel Spacing	25 / 20 / 12.5KHz	
	Operating Voltage	7.4V	
	Battery	1500mAh (Li-Ion)	
	Battery Life (5/5/90)	Analog	Approx. 11hrs
		Digital	Approx. 16hrs
	Frequency Stability	±0.5ppm	
	Antenna Impedance	50 Ω	
	Dimensions (HxWxD)	PD602	4.7 x 2.13 x 1.1 inches
		PD662 PD682	4.8 x 2.17 x 1.1 inches
	Weight	PD602	10.23oz
		PD662 PD682	10.93oz
FCC ID	See website for full list		
Industry Canada ID	See website for full list		

Environmental Specifications	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	TTF (Time To First Fix) Cold Start	<1 minute
	TTF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<10 meters

Transmitter	RF Power Output	VHF: High 5W - Low 1W UHF: High 4W - Low 1W
	FM Modulation (Analog Emissions Designator)	11K f F3E @ 12.5KHz; 14Kf F3E @ 20KHz; 16Kf F3E @ 25KHz
	4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7K6f FXD 12.5KHz Data & Voice: 7Kf 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 mV (12dB SINAD); 0.22 mV (Typical) (12dB SINAD); 0.4 mV (20dB SINAD)
		Digital	0.22 mV/BER5%
	Selectivity	60dB @ 12.5KHz / 70dB @ 20/25KHz 60dB @ 12.5KHz / 70dB @ 20/25KHz	
	Intermodulation	70dB @ 12.5/20/25KHz 65dB @ 12.5/20/25KHz	
	Spurious Response Rejection	70dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz	
	Blocking	90dB 84dB	
	S/N	40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz	
	Rated Audio Distortion	≤ 3%	
	Audio Response	+1 ~ -3dB	
	Conducted Spurious Emission	< -57dBm	

## Your Local Dealer

Hytera Communications (Canada) Inc.

Address: 100 Leek Crescent, Unit 11  
Richmond Hill, Ontario L4B 3E6  
Tel: (905) 305-7545

http://www.hytera.ca http://www.hytera.us

**Hytera**  
Respond & Achieve

20KHz / 25KHz will not be available on new equipment in the U.S. after January 1<sup>st</sup>, 2011

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