

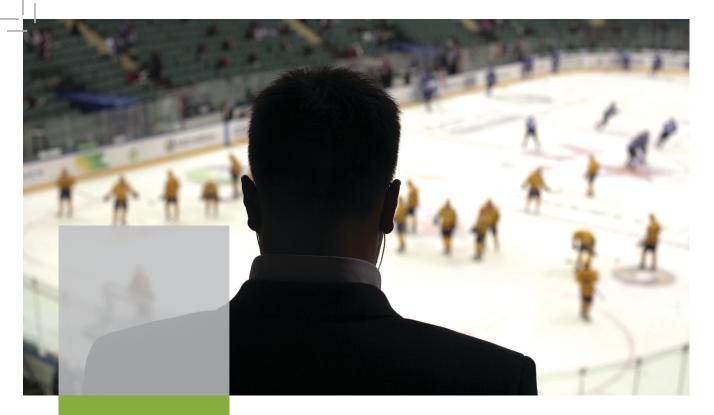
# **PD5 Series**

Digital Portable Radio









PD5 Series The PD5 Series is an open-standard DMR radio capable of providing quality voice communication in a design approved to IP54 and MIL-STD 810 testing. The Hytera-patented pseudotrunking maximizes channel usage and the long lasting battery life yields approximately 16 hours under a 5-5-90 duty cycle in digital mode. The PD5 Series is the ideal solution for organizations looking for a cost-effective way to migrate to clear digital communication.

## **Applications**

Hotel

### **Product Features**

#### Smaller, Sleeker, Lighter

The PD502 is  $4.53 \times 2.13 \times 1.06$  inches, weighing 9.7oz. The PD562 is  $4.53 \times 2.13 \times 1.18$  inches, weighing 9.9oz. The PD5 Series has dual-color injection molding.

#### Long Battery Life

In digital mode, the PD5 Series can operate for approximately 16 hours under a duty cycle of 5-5-90.

#### Rugged & Reliable

Complies with MIL-STD-810 C/D/E/F/G standards and is IP54 (5: Generally protected against dust; 4: Protected against the effects of light rain or minor water splashes) ensuring outstanding performance.

#### Advanced Signaling

Supports multiple advanced analog signaling modes, including HDC1200, 2-Tone and 5-Tone, providing better integration into existing analog radio fleets.

#### Secure Communication

Provides basic digital encryption and Scrambler feature in analog mode.

#### DMRA Data Service

The data protocol is fully compliant to the DMRA standard.

#### One Touch Call/Text

Supports One Touch features that include Preprogrammed Text Messages, Voice Calls and Supplementary Features.

#### Supplementary Features (Factory Option)

The PD5 Series can decode radio enable, radio disable, and remoter monitor, as well as Priority Interrupt.

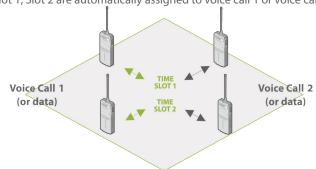
#### Dual Mode: Analog & Digital

Dual modes operation allows the programming of both analog to digital migration.

#### 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.

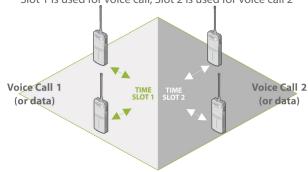
Slot 1, Slot 2 are automatically assigned to voice call 1 or voice call 2



#### DMO True 2-Slot

In direct mode Hytera can provide 2-slot communication, which allows for 2 talk paths on 1 frequency. See example below.

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
- Leather Strap



Remote Speaker Microphone (IP55) SM13M1



MCU Multi Unit Charger (for Thick Batteries) MCA08



Programming Cable (USB Port) PC63



Battery 2000mAh (Li-lon) BL2010

# **Specifications**

	Frequency Range		VHF: 136 - 174MHz UHF: 400 - 470MHz	
	Channel Capacity	PD502	32	
		PD562	512	
	Zone Capacity	PD502	3	
		PD562	32	
	Channel Spacing		25 / 20 / 12.5KHz	
	Operating Voltage		7.4V	
	Battery		1500mAh (Li-lon)	
eral	Battery Life (5/5/90)	Analog	Approx. 11hrs	
General		Digital	Approx. 16hrs	
	Frequency Stability		±0.5ppm	
	Antenna Impedance		50 Ω	
	Dimensions (HxWxD)	PD502	4.53 x 2.13 x 1.06 inches	
		PD562	4.6 x 2.17 x 1.18 inches	
	Weight	PD502	9.17oz	
		PD562	9.9oz	
	FCC ID	Si	See website for full list	
	Industry Canada ID	Se	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	М	MIL-STD-810 C/D/E/F/G	
	Dust & Water Intrusion		IP54 Standard	
	Humidity	Per MIL-S	Per MIL-STD-810 C/D/E/F/G Standard	
	Shock & Vibration	Per MIL-S	Per MIL-STD-810 C/D/E/F/G Standard	
	TTFF (Time To First Fix) Cold Start		<1 minute	
GPS	TTFF (Time To First Fix) Hot Start		<10 seconds	
	Horizontal Accuracy		<10 meters	

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Transmitter	4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7K6 <b>f</b> FXD 12.5KHz Data & Voice: 7K6 <b>f</b> 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 <b>m</b> V/BER5%
	Selectivity TIA-603 ETSI	60dB @ 12.5KHz / 70dB @ 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	
	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	

VHF: High 5W - Low 1W

UHF: High 4W - Low: 1W

11K **f** F3E @ 12.5KHz; 14K**f** F3E @ 20KHz;

16K**f** F3E @ 25KHz

Your Local Dealer	

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

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RF Power Output

FM Modulation

(Analog Emissions Designator)

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



