

# **Features**

### Small, Sleek, Light

The size is 115 X 54 X 27mm (PD505)/115 X 54 X 30mm (PD565), dual-color injection, weight is 260g (PD505)/280g (PD565).

## **Long Battery Life**

In digital mode, PD505 operates at least 16 hours under a duty cycle of 5-5-90.

#### Rugged & Reliable

It is compliant with MIL-STD-810 C/D/E/F/G standards & IP54.

#### One Touch Call/Text

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

## **Supplementary Features (optional)**

PD50X can decode radio enable, radio disable, and remote monitor, as well as Priority Interrupt.

### **Dual Mode (Analogue & Digital)**

Dual modes (analogue & digital) operation ensures a smooth analogue to digital migration.



#### **Secure Communication**

Provides basic digital encryption and Scrambler feature in analog mode.

## **Advanced Signaling**

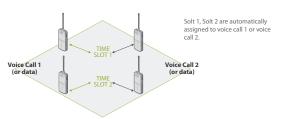
Supports multiple advanced analog signaling modes, including HDC1200, 2-Tone and 5-Tone, providing better integration into existing analogue radio fleets.

#### **DMRA Data Service**

The data protocol is fully compliant to DMRA standard.

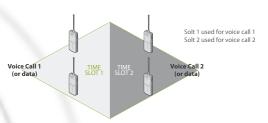
#### **Pseudo Trunk**

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.



#### **DMO True 2-Slot**

In DMO Hytera can provide 2-slot communication, which allows for 2 talk paths on 1 frequency.



## **Preprogrammed Text Messages**

# Highlights

- Ergonomic User-Friendly Design
- Light & Durable
- Compact Size & Clear Voice
- Affordable

# **Target Markets**



Retail Shopping Malls with high noise level require radios with good noise reduction.



Education
PD505 has compact size for easy use that is capable of reaching long communication distance of a school or university campus.



Security
Enriched with several encryption types PD505
will make your communication more private.



Warehouse A durable battery allows for full shifts without the need to recharge.



Hotel Heavy communication traffic require more effective use of frequency resources.



Rent
The rent function is useful for those hiring/leasing radios.



# **Specifications**

		General
Frequency Range		UHF: 400-470MHz, VHF: 136-174MHz
Channel Capacity		32 (PD505)/512 (PD565)
Zone Capacity		3 (PD505)/32 (PD565)
Channel Spacing		25/20/12.5KHz
Operating Voltage		7.4V
Battery		1500mAh (Li-lon) 2000mAh (Li-lon)
Battery Life (5/5/90 )		Analog: about 11 Hours Digital: about 16 Hours
Weight		260g (PD505)/280g(PD565)
Dimensions		115 x 54 x 27mm (PD505) 115 x 54 x 30mm (PD565)
Frequency Stability		±0.5ppm
Antenna Impedance		50Ω
		Receiver
Sensitivity (Digital)		0.22μV / BER 5%
Sensitivity (Analogue)		0.22µV (Typical) (12dB SIN AD) 0.4µV (20dB SIN AD) 0.22µV (12dB SIN AD)
Adjacent Selectivity	TIA-603	60dB @ 12.5KHz/70dB @ 20 & 25KHz
	ETSI	60dB @ 12.5KHz/70dB @ 20 & 25KHz
Spurious	TIA-603	70dB @ 12.5/20/25KHz
Pospopso	11/1 003	700D@12.3/20/23N12
Response Rejection	ETSI	70dB @ 12.5/20/25KHz
Rejection		
	ETSI	70dB @ 12.5/20/25KHz
Rejection	ETSI TIA-603	70dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz
Rejection Inter-modulation	ETSI TIA-603 ETSI	70dB @ 12.5/20/25KHz  70dB @ 12.5/20/25KHz  65dB @ 12.5/20/25KHz  40dB @ 12.5KHz  43dB @ 20KHz
Rejection  Inter-modulation  Hum & Noise	ETSI TIA-603 ETSI	70dB @ 12.5/20/25KHz  70dB @ 12.5/20/25KHz  65dB @ 12.5/20/25KHz  40dB @ 12.5KHz  43dB @ 20KHz  45dB @ 25KHz
Rejection Inter-modulation Hum & Noise Rated Audio Power O	ETSI TIA-603 ETSI	70dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz 65dB @ 12.5/20/25KHz 40dB @ 12.5KHz 43dB @ 20KHz 45dB @ 25KHz 0.5W

Transmitter			
RF Power Output	VHF High power: 5W VHF Low power: 1W UHF High power: 4W UHF Low power: 1W		
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++ or SELP		
Digital Protocol	ETSI-TS102 361-1,-2,-3		
Environmental			
Operating Temperature	-30°C~ +60°C		
Storage Temperature	-40°C~ +85°C		
ESD	IEC 61000-4-2 (Level 4) ±8kV (Contact) ±15kV (Air)		
Dustproof & Waterproof	IP54 Standard		
Humidity	Per MIL-STD-810 C/D/E/F/G Standard		
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard		











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