





Digital Migration Radio

PD402 & SERIES

Digital voice, louder and clearer Analog & Digital Mixed Channel

www.hytera.us



### **Features**

Private call, Group call and All call

Small, Sleek, Light

In digital mode, the radio operates up to 16 hours under a duty cycle of 5-5-90 @1500mAh.

IP55 & MIL-STD-810 C/D/E/F/G standards

Pre-programmed Text Message

Support one touch pre-programmed text messages and voice calls.

Dual Mode (Analog & Digital) ensures a smooth migration from analog to digital.

Voice-operated Transmit (VOX) allows you to trigger the voice transmission by voice directly.

PD402i support Radio Registration Service (RRS), Emergency Alarm & Call, Remote Monitor Decode (Optional), Radio Disabled Decode (Optional) and Priority Interrupt Decode (Optional).

Automatic roaming of all site in an IP Connect system.

Several talk groups share the same frequency, and each one of them can dynamically chose to use one of the slots to talk. This is a two-slot-trunked mode. While time-slot 1 is busy, PD402i will use time-slot 2 to transmit.



## **Target Markets**



#### Construction

At the noisy construction site, a radio with good voice quality and reliable in use can make all the difference.



#### Warehouse

A durable battery supports full shifts without recharge.



#### Security

Steady wireless signal receiving improves security work performance and



#### **Factory**

Military standard and good dust-proof & water-proof rating (IP55) protect the radio from damage in complex environment of factory.

### Standard



Li-ion battery (1500mAh) BL1504



Belt clip BC08



General MCU Rapid-rate Charger Short antenna (for Li-lon/Ni-MH batteries) CH10A07





Switching Power Adapter



Hand strap

## **Options**



# **Specifications**

		General
Frequency Range		UHF: 350-400MHz, 400-470MHz VHF: 136-174MHz
Channel Capacity		256
Zone Capacity		3
Channel Spacing		25/12.5KHz
Operating Voltage		7.4V
Battery		1500mAh (Li-lon) 2000mAh (Li-lon)
Battery Life (5/5/90 )		Analog/Digital: 12/16 hours (1500mAh) 16/22 hours (2000mAh)
Weight		270g
Dimensions		112×54×28mm
Frequency Stability		±0.5ppm
Antenna Impedance		50Ω
		Receiver
Sensitivity (Digital)		0.22μV / BER 5%
Sensitivity (Analog)		
Sensitivity (Analog)		0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD)
	TIA-603	0.4µV (20dB SIN AD)
Sensitivity (Analog)  Adjacent Selectivity	TIA-603 ETSI	0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD)
Adjacent Selectivity  Spurious		0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD) 60dB @ 12.5KHz/70dB @ 25KHz
Adjacent Selectivity	ETSI	0.4µV (20dB SIN AD) 0.22µV (12dB SIN AD) 60dB @ 12.5KHz/70dB @ 25KHz 60dB @ 12.5KHz/70dB @ 25KHz
Adjacent Selectivity  Spurious Response Rejection	ETSI TIA-603	0.4µV (20dB SIN AD) 0.22µV (12dB SIN AD) 60dB @ 12.5KHz/70dB @ 25KHz 60dB @ 12.5KHz/70dB @ 25KHz 70dB @ 12.5/25KHz
Adjacent Selectivity  Spurious Response	ETSI TIA-603 ETSI	0.4µV (20dB SIN AD) 0.22µV (12dB SIN AD) 60dB @ 12.5KHz/70dB @ 25KHz 60dB @ 12.5KHz/70dB @ 25KHz 70dB @ 12.5/25KHz 70dB @ 12.5/25KHz
Adjacent Selectivity  Spurious Response Rejection	ETSI TIA-603 ETSI TIA-603	0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD) 60dB @ 12.5KHz/70dB @ 25KHz 60dB @ 12.5KHz/70dB @ 25KHz 70dB @ 12.5/25KHz 70dB @ 12.5/25KHz
Adjacent Selectivity  Spurious Response Rejection  Inter-modulation	ETSI TIA-603 ETSI TIA-603 ETSI	0.4µV (20dB SIN AD) 0.22µV (12dB SIN AD) 60dB @ 12.5KHz/70dB @ 25KHz 60dB @ 12.5KHz/70dB @ 25KHz 70dB @ 12.5/25KHz 70dB @ 12.5/25KHz 70dB @ 12.5/25KHz 65dB @ 12.5/25KHz
Adjacent Selectivity  Spurious Response Rejection  Inter-modulation  Hum & Noise	ETSI TIA-603 ETSI TIA-603 ETSI UA-603 ETSI	0.4µV (20dB SIN AD) 0.22µV (12dB SIN AD) 60dB @ 12.5KHz/70dB @ 25KHz 60dB @ 12.5KHz/70dB @ 25KHz 70dB @ 12.5/25KHz 70dB @ 12.5/25KHz 70dB @ 12.5/25KHz 40dB @ 12.5/25KHz 40dB @ 25KHz
Adjacent Selectivity  Spurious Response Rejection  Inter-modulation  Hum & Noise  Rated Audio Power O	ETSI TIA-603 ETSI TIA-603 ETSI UA-603 ETSI	0.4µV (20dB SIN AD) 0.22µV (12dB SIN AD) 60dB @ 12.5KHz/70dB @ 25KHz 60dB @ 12.5KHz/70dB @ 25KHz 70dB @ 12.5/25KHz 70dB @ 12.5/25KHz 70dB @ 12.5/25KHz 40dB @ 12.5/25KHz 40dB @ 12.5/25KHz 40dB @ 25KHz 40dB @ 25KHz 45dB @ 25KHz

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 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 ±5.0KHz @ 25KHz		
FM Hum & Noise	40dB @ 12.5KHz 45dB @ 25KHz		
Adjacent Channel Power	60dB @ 12.5KHz, 70dB @25KHz		
Audio Response	+1 ~ -3dB		
Audio Distortion	≤3%		
Digital Vocoder Type	AMBE+2 ™		
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	Ip55 Standard		
Humidity	Per MIL-STD-810 C/D/E/F/G Standard		
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard		

All specifications are subject to change without notice due to continuous development.











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