

# Digital **Patrol** Radio PD41X

DMR standard radio, double channel capacity Analog & Digital Mixed Channel, embedded RFID





**Avter** 

www.hytera.com

## Features

#### **Abundant Voice Call**

Voice communication includes private, group and all call.



#### Embedded RFID

With an embedded RFID reader, PD41X can read the information of a RFID tag and automatically send it out by radio. These RFID and data auto transmission features make PD41X supporting Hytera Patrol system, which is a real-time tour guard solution. Hytera also offers the open API of PD41X for developing your own application.



#### **Rugged & Reliable**

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

#### Small, Sleek, Light

With dual-color injection, the size is 112×55×31mm and weight is 270g.

#### **Long Battery Life**

In digital mode, PD41X operates at least 16 hours under a duty cycle of 5-5-90 @1500mAh.

#### **Preprogrammed Text Messages**

#### **One Touch Call/Text**

Support One Touch features that comprise of Voice Calls and Preprogrammed Text Messages.

#### Dual Mode (Analog & Digital)

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

#### VOX

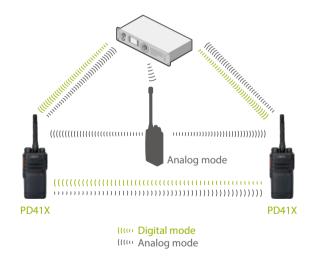
The VOX (Voice-operated Transmit) feature allows you to trigger the voice transmission by voice directly rather than PTT. This brings more convenience to you in radio use.

#### **Further Development Port for radio and RFID**

The API allows third party partner to further develop other helpful applications to extend the radio RFID functionalities.

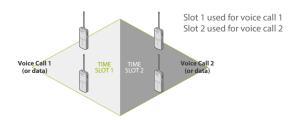
#### **Analog & Digital Mixed Channel**

PD41X can detect both analog and digital signal and automatically switch between analog and digital mode to receive it on a single channel. And it can reply to the received call, while the talk back timer remains. This feature makes a better migration from analog radio to digital radio and save your existing investment.



#### DMRA Direct Mode TDMA (True 2-slot)

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





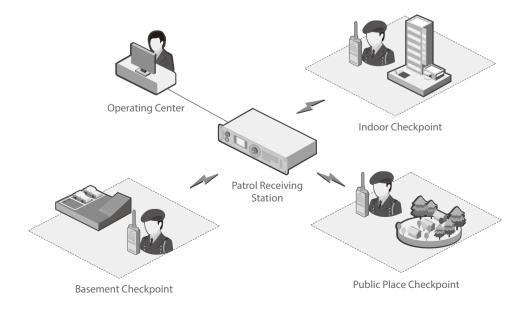
LIGHT & DURABLE DIGITAL VOICE, CLEARER AND LOUDER EMBEDDED RFID ANALOG & DIGITAL MIXED CHANNEL





## Hytera PD41X Patrol System

Hytera Patrol System is a tour guard solution to provide real-time tracking management. It's composed of Patrol Radio, Receiving Station, Patrol Checkpoint and Patrol Software. It allows an operator to monitor the real-time tour guard because the patrol data is sent to the receiving station connected to PC (Patrol Software). And this system also supports some features including one-touch alarm on radio, patrol data resend, setting patrol plan, data query, data backup, etc.



## **Target Markets**



## Standard

Options



## Specifications

		General
Frequency Range		UHF: 400-470MHz, 450-520MHz VHF: 136-174MHz
Channel Capacity		32
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		112×55×31mm
Frequency Stability		±0.5ppm
Antenna Impedance		50Ω
RFID Reading Range		up to 4cm
		Receiver
Sensitivity (Digital)		0.22µV / BER 5%
Sensitivity (Analog)		0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD)
Adjacent Selectivity	TIA-603	60dB @ 12.5KHz/70dB @ 25KHz
	ETSI	60dB @ 12.5KHz/70dB @ 25KHz
Spurious Response Rejection	TIA-603	70dB @ 12.5/25KHz
	ETSI	70dB @ 12.5/25KHz
Inter-modulation	TIA-603	70dB @ 12.5/25KHz
	ETSI	65dB @ 12.5/25KHz
Hum & Noise		40dB @ 12.5KHz 45dB @ 25KHz
Rated Audio Power Output		0.5W
Rated Audio Distortion		≤3%
Audio Response		+1 ~ -3dB
Audio Response		+1~-5ub

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++	
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	

PD41X, X=0, 2, 5,6 or 8, model number varies geographically. For details, please contact our regional sales representatives.

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





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