

# Digital Patrol Radio PD41X

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



# Features

## Abundant Voice Call

Voice communication includes private, group and all call.



## Rugged & Reliable

It is compliant with MIL-STD-810 G standards & IP54.

## Small, Sleek, Light

With dual-color injection, the size is 112x55x31mm and weight is 270g.

## Long Battery Life

In digital mode, PD41X operates a minimum of 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 your 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.

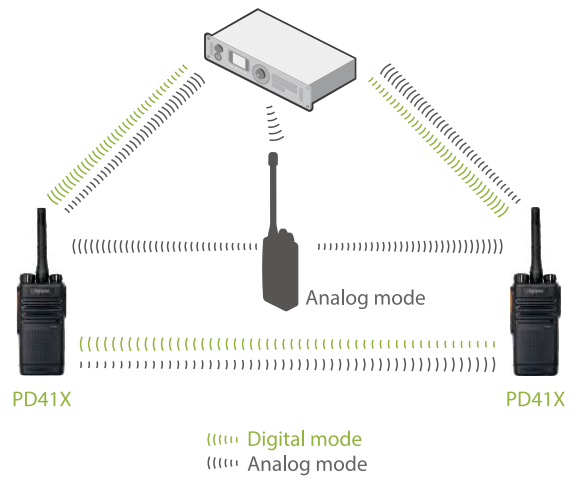
## Embedded RFID

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 of PD41X supports Hyteras Patrol system. This is a real-time patrol guard solution. Hytera also offers the open API of PD41X for developing your own application.



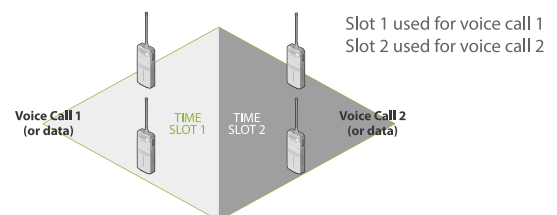
## Analog & Digital Mixed Channel

PD41X can detect both analog and digital signal and automatically switch between analog and digital mode to receive it on a single channel. It can reply to the received call, while the talk back timer remains. This feature makes for 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

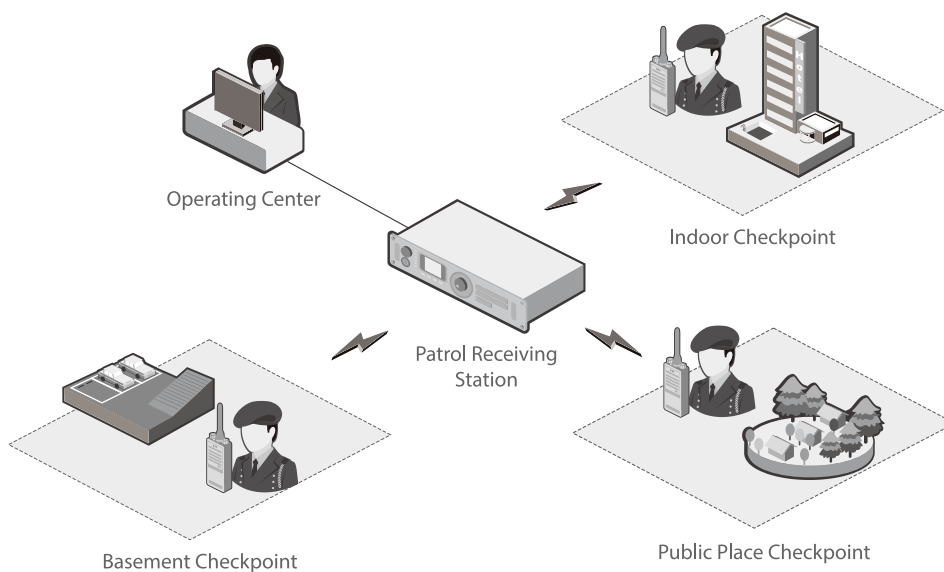


RFID board



## Hytera PD41X Patrol System

Hytera Patrol System is a patrol 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 patrol 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



Li-ion battery  
(1500mAh)  
BL1504



Belt clip  
BC08



General MCU Rapid-rate Charger  
(for Li-Ion/Ni-MH batteries)  
CH10A07



Whip antenna



Switching Power Adapter



Hand strap

## Options



# Specifications

General	
Frequency Range	UHF:350-400MHz, 400-470MHz, 450-520MHz VHF: 136-174MHz
Channel Capacity	48
Zone Capacity	3
Channel Spacing	25/12.5KHz
Operating Voltage	7.4V
Battery	1500mAh (Li-Ion) 2000mAh (Li-Ion)
Battery Life (5/5/90)	Analog/Digital: 12/16 hours (1500mAh) 16/22 hours (2000mAh)
Weight	270g
Dimensions	112x55x31mm
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
Conducted Spurious Emission	<-57dBm

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 G Standard
Shock & Vibration	Per MIL-STD-810 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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