Hytera

Digital Patrol Radio PD415

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

DMR
DIGITAL MOBILE RADIO ASSOCIATION



www.hytera.co.uk

Features

Abundant Voice Call

Voice communication includes private, group and all call.



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

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

Dual Mode (Analog & Digital)

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

VOX

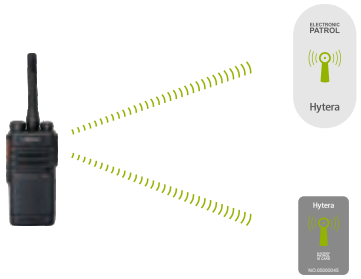
The VOX (Voice-operated Transmit) feature allows you to trigger the voice transmission by voice directly rather than PTT. This brings convenience to you in radio use.

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.

Embedded RFID

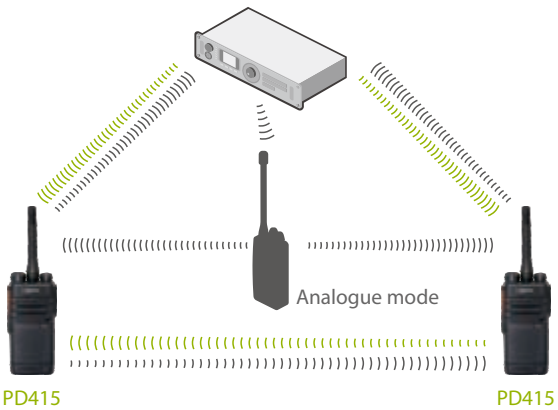
With an embedded RFID reader, PD415 can read the information of a RFID tag and automatically send it out by the radio. These RFID and data auto transmission feature enables PD415 to support Hytera Patrol system, which is a real-time tour guard solution. Hytera also offers the open API of PD41X for developing your own application.



RFID

Analogue & Digital Mixed Channel

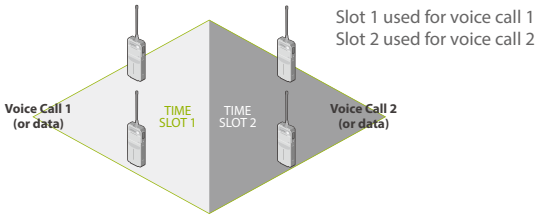
PD415 can detect both analogue and digital signal and automatically switch between the two modes to receive it on a single channel. It can reply to the received call, while the talk back timer remains. This feature makes a better migration from analogue radio to digital radio and save your existing investment.



Digital mode
Analogue mode

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

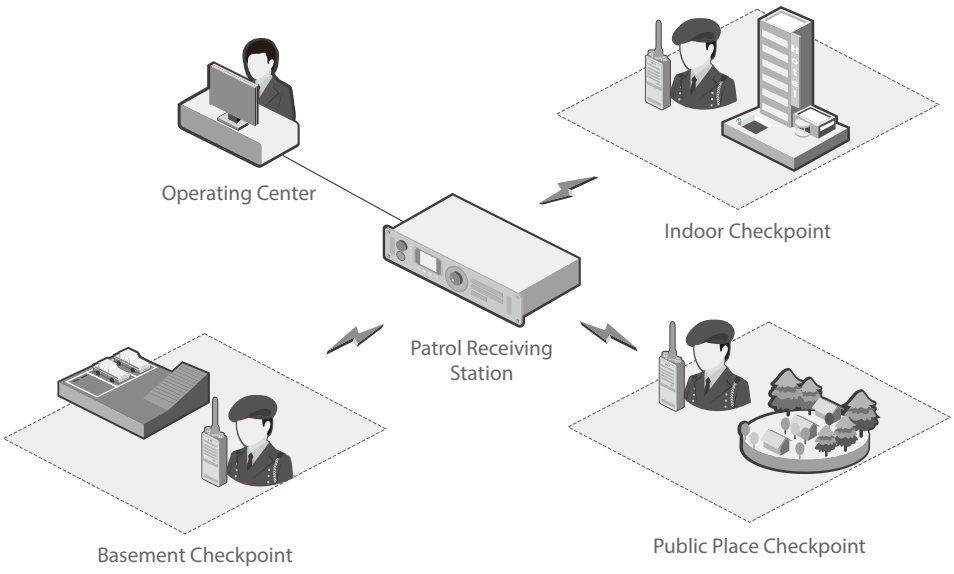
ANALOGUE & DIGITAL MIXED CHANNEL



RFID board

Hytera PD415 Patrol System

Hytera Patrol System is a tour guard solution to provide real-time tracking management. It is 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). 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



Short antenna



Switching Power Adapter



Hand strap

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-Ion) 2000mAh (Li-Ion)
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 (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 @ 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℃~ +60℃
Storage Temperature	-40℃~ +85℃
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.

Hytera
Respond & Achieve

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