

# Digital Migration Radio PD6 Series

DMR Standard Radio, Feature-Rich, Innovative Design,  
Compact Size, Integrates with Hytera Applications



# Features

## Small, Sleek, Light

The size is 119 X 54 X 27mm (PD60X)/122 X 54 X 27mm(PD66X/68X), PC & Metal frame, weight is 290g (PD60X)/310g (PD66X/68X).



## IP67 Compliance

IP67 rated withstanding up to 1m submersion for 30 minutes or more.

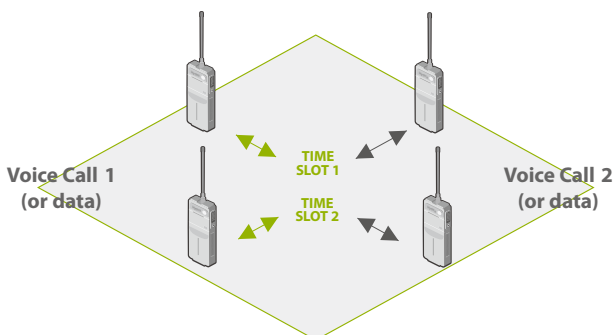


## Rugged & Reliable

Compliant with MIL-STD-810 C/D/E/F/G standards.

## 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.



Solt 1, Solt 2 are automatically assigned to voice call 1 or voice call 2.

## Full Band

Expanded frequency range of 400-527MHz.

## Dual Mode (Analog & Digital)

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

## Secure Communication

Provides basic/advanced 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 analog radio fleets.

## DMRA Data Service

The data protocol is fully compliant to DMRA standard.

## GPS Positioning (Factory Option)

The built-in GPS module supports GIS applications.

## Man Down (Factory Option)

When a user falls down, the radio can automatically alert others.

## Further Development Port

The reserved side port in PD6 Series allow users or any third party partner to further develop other helpful applications to extend radio functionalities.

## One Touch Call/Text

Supports One Touch features that comprise of Preprogrammed Text Messages, Voice Calls and Supplementary Features. PD68X supports input 256 character message via keyboard.

## Supplementary Features

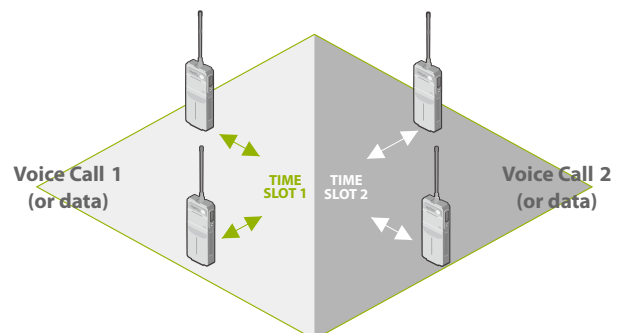
PD6 Series provide radio enable/disable, remoter monitor and Priority Interrupt.

## Radio Priority-Based Interruption

Enable an administration or manager radio to interrupt calls for emergency or urgent communication.

## DMO True 2-Slot

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



Solt 1 used for voice call , Solt 2 used for voice call 2

## Small, Sleek, Light

The size is 119 X 54 X 27mm (PD60X)  
122 X 54 X 27mm (PD66X/68X),  
weight is 290g (PD60X)/310g (PD66X/68X).

## Metal Frame

Metal frame design,  
smooth texture,  
comfortable to hold and use.



## Target Markets



### Construction

At the noisy construction site a good voice quality radio can make all the difference.



### Forestry

Safety functions (man down, lone worker, emergency alarm) give you peace of mind when working alone or on remote locations.



### Bank

Complete dispatch system can provide security recording and monitoring.



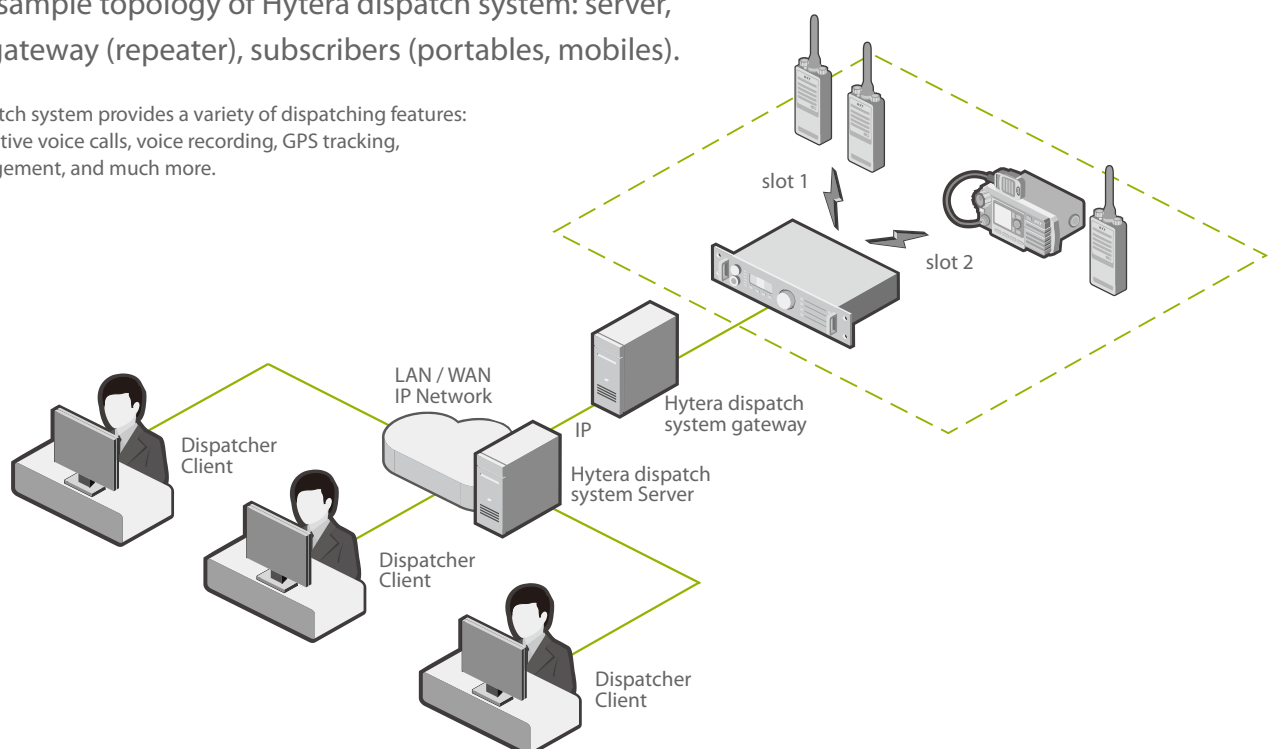
### Factory

Highest dust and water rating (IP67) to withstand dust and liquid impact on the factory floor.

## Applications

This is a sample topology of Hytera dispatch system: server, clients, gateway (repeater), subscribers (portables, mobiles).

Hytera dispatch system provides a variety of dispatching features: such as selective voice calls, voice recording, GPS tracking, alarm management, and much more.



## Accessories



Pictures above are for reference only and may vary from actual products.

|                 |                                            |                |                                                             |
|-----------------|--------------------------------------------|----------------|-------------------------------------------------------------|
| <b>BL1502</b>   | Li-ion Battery (1500mAh)                   | <b>EHN21</b>   | Remote C-Earset                                             |
| <b>BL2010</b>   | Li-ion Battery (2000mAh)                   | <b>ESN14</b>   | Remote Earbud                                               |
| <b>RO03</b>     | Strap                                      | <b>EHN20</b>   | Remote Swivel Earset                                        |
| <b>MCA08</b>    | MCU Multi-Unit Charger (for Thick Battery) | <b>EAN22</b>   | Detachable Earpiece with Transparent Acoustic Tube          |
| <b>MCA05</b>    | Battery Optimizing System                  | <b>PC45</b>    | Programming Cable (USB Port)                                |
| <b>BC19</b>     | Belt Clip                                  | <b>NCN011</b>  | Nylon Carrying Case (half-folded, non-swivel, black)        |
| <b>ESW01-N2</b> | Wireless Earset Kit                        | <b>CH10A07</b> | General MCU Rapid-rate Charger (for Li-Ion/Ni-MH Batteries) |
| <b>Antenna</b>  |                                            | <b>Adapter</b> |                                                             |

### High-Capacity Battery & Battery Charger:

BL1502 Li-ion Battery 1500mAh; BL2010 Li-ion Battery 2000mAh, MCA05 Battery Optimizing System & MCA08 MCU Multi-Unit Charger (for Thick Battery) . For users requiring long-time operation, a high-capacity battery with battery optimizing system is undoubtedly the best match. The 2000mAh Li-ion battery for PD6 Series ensure up to 16 hours of work.

### Audio Accessories:

EHN21 Remote C-Earset, ESN14 Remote Earbud, EHN20 2-wire Surveillance Earpiece with Transparent Acoustic Tube (Black), EAN22 Detachable Earpiece with Transparent Acoustic Tube. PD6 Series have a variety of audio accessories for flexible use in different environments.

# Specifications

| General                     |                                                                               |
|-----------------------------|-------------------------------------------------------------------------------|
| Frequency Range             | VHF: 136-174MHz<br>UHF1: 400-527MHz                                           |
| Channel Capacity            | 32 (PD60X)/1024 (PD66X/68X)                                                   |
| Zone Capacity               | 3 (PD60X)/64 (PD66X/68X)                                                      |
| Channel Spacing             | 25/20/12.5KHz                                                                 |
| Operating Voltage           | 7.4 V                                                                         |
| Battery(Li-Ion)             | 1500mAh/2000mAh                                                               |
| Battery Life (5/5/90)       | Analog: about 11 Hours<br>Digital: about 16 Hours                             |
| Weight                      | 290g (PD60X)/310g (PD66X/68X)                                                 |
| Dimensions                  | 119 X 54 X 27mm (PD60X)<br>122 X 54 X 27mm (PD66X/68X)                        |
| Frequency Stability         | ±0.5 ppm                                                                      |
| Antenna Impedance           | 50Ω                                                                           |
| Receiver                    |                                                                               |
| Sensitivity (Analog)        | 0.22μV (12dB SIN AD)<br>0.22μV (Typical) (12dB SIN AD)<br>0.4μV (20dB SIN AD) |
| Sensitivity (Digital)       | 0.22μV/BER 5%                                                                 |
| Adjacent Selectivity        | TIA-603 60dB @ 12.5KHz/70dB @ 20 & 25KHz                                      |
|                             | ETSI 60dB @ 12.5KHz/70dB @ 20 & 25KHz                                         |
| Spurious Response Rejection | TIA-603 70dB @ 12.5/20/25KHz                                                  |
|                             | ETSI 70dB @ 12.5/20/25KHz                                                     |
| Inter-Modulation            | TIA-603 70dB @ 12.5/20/25KHz                                                  |
|                             | ETSI 65dB @ 12.5/20/25KHz                                                     |
| Hum & Noise                 | 40dB @ 12.5KHz<br>43dB @ 20KHz<br>45dB @ 25KHz                                |
| Rated Audio Power Output    | 0.5W                                                                          |
| Rated Audio Distortion      | ≤3%                                                                           |
| Audio Response              | +1 ~ -3dB                                                                     |
| Conducted Spurious Emission | <-57dBm                                                                       |

PD60X/66X/68X, X=0, 2, 5, 6 or 8, model number varies geographically. For details, please contact our regional sales representatives.

| Transmitter                         |                                                                                |
|-------------------------------------|--------------------------------------------------------------------------------|
| RF Power Output                     | VHF High power 5W<br>VHF Low power 1W<br>UHF High power 4W<br>UHF Low power 1W |
| FM Modulation                       | 11K0F3E @ 12.5KHz<br>14K0F3E @ 20KHz<br>16K0F3E @ 25KHz                        |
| 4FSK Digital Modulation             | 12.5KHz Data Only: 7K60FXD<br>12.5KHz Data & Voice: 7K60FXW                    |
| Conducted/Radiated Emission         | -36dBm <1GHz<br>-30dBm >1GHz                                                   |
| Modulation Limiting                 | ±2.5KHz @ 12.5KHz<br>±4.0KHz @ 20KHz<br>±5.0KHz @ 25KHz                        |
| FM Hum & Noise                      | 40dB @ 12.5KHz<br>43dB @ 20KHz<br>45dB @ 25KHz                                 |
| Adjacent Channel Power              | 60dB @ 12.5KHz<br>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℃ ~ +60℃                                                                    |
| Storage Temperature                 | -40℃ ~ +85℃                                                                    |
| ESD                                 | IEC 61000-4-2 (Level 4)<br>±8kV (Contact)<br>±15kV (Air)                       |
| American Military Standard          | MIL-STD-810 C/D/E/F/G                                                          |
| Dustproof & Waterproof              | IP67 Standard                                                                  |
| Humidity                            | Per MIL-STD-810 C/D/E/F/G Standard                                             |
| Shock & Vibration                   | Per MIL-STD-810 C/D/E/F/G Standard                                             |
| GPS                                 |                                                                                |
| TTFF (Time To First Fix) Cold Start | <1 minute                                                                      |
| TTFF (Time To First Fix) Hot Start  | <10 seconds                                                                    |
| Horizontal Accuracy                 | <10 meters                                                                     |

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



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