

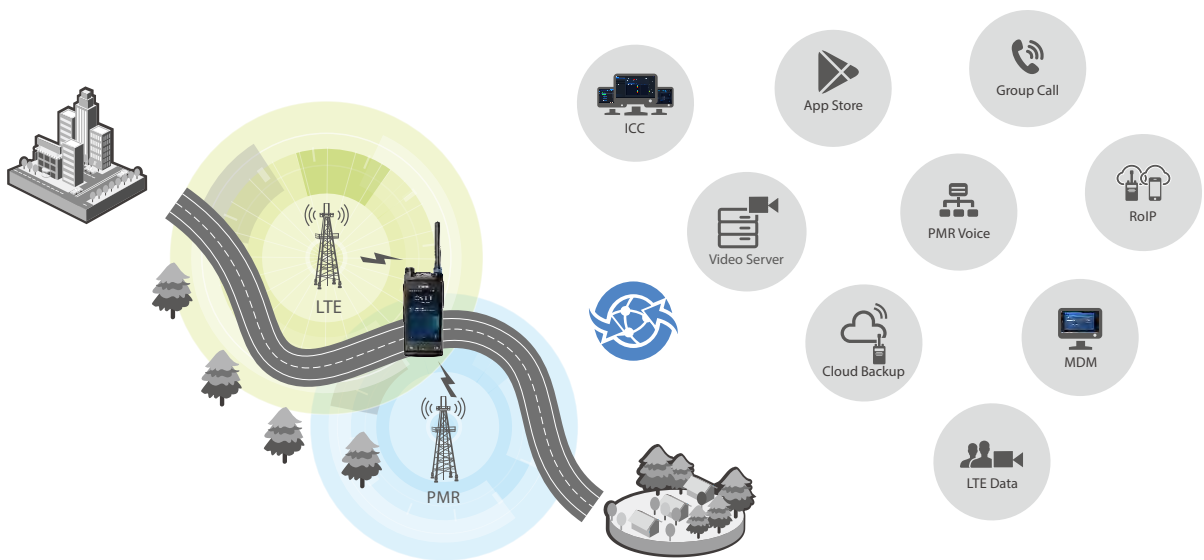
# PDC760 Multi-mode Advanced Radio



# New Convergent Solution

Hytera's new Multi-mode Advanced Radio is a revolutionary device that was designed with the private radio network industry in mind. The first of its kind to offer a truly convergent platform for both critical voice communications and broadband data services. This innovative development marks a significant milestone within the two-way radio communications industry. The PDC760 supports multi-mode communications across a wide range of scenarios, whether its daily business operations or emergency response, broadband or narrowband, public or private networks, Hytera's multi-mode advanced radio can meet all your communications needs.

The PDC760 offers users a unified communications experience with a rich selection of applications and high-level data security; the radio is built to handle any critical communications situation and improve operational efficiency. The ergonomic design combined with a rugged chassis and touch-screen display support a new sensory experience to meet a diverse set of communications requirements that allows users to improve situational awareness to respond and achieve quickly and effectively.



## Product Overview



### Senses

The Hytera Multi-mode Advanced Radio delivers excellent situational awareness by smartly detecting the surrounding environment, providing alerts and acquiring data in real time. Communicating continuously with back-end systems, you can improve your operational effectiveness with instant feedback and informed decision making. The device will become an extension of your senses, assuring your safety and enhancing your response with on-demand services.



### Seamless

Whenever and wherever, Hytera Multi-mode Advanced Radio is always your best communication assistant and brings you great voice communication experience. With intelligent seamless network switch among multiple communication modes, the radio meets on-demand requirements to let you enjoy seamless and fresh communication experience without the limitation of time and space.



### Supervision

In the public safety and utility industries, communications and data security is always a top priority. Hytera's PDC760 multi-mode advanced radio is designed to provide complete, secure control of your communications system. The radio offers effective linkage control between the radio and back-end systems and utilizes multiple encryption and authentication technologies to fully protect the radio system, data storage, data transmission and device control, effectively preventing a malware attack, illegal operation and data interception.

# Interactive Design Features

## Mission Critical UI Design

- One Hand Operation
- Smart Keys & Programmable Keys
- Intuitive User Interface
- Rich Information on Home Page
- Customized favorites

## User-friendly Keys

- Multi-functional control (press and rotate)
- Switch between volume & channels (in conventional mode)
- Switch between volume & contacts (in trunking mode)

- Smart key
- Function varies depending on applications

- PTT
- Easy to use
- Large button

- Programmable keys

## Rugged and Durable Structure

- IP67
- 1.2 metre drop test
- MIL-STD-810G

## Quick Identification

- Interchangeable color ring to quickly identify radio

## HD Camera

- Front & rear 13MP cameras
- Rear camera supports 4K HD video

## Dual-screen Design

- Dual-screen for power saving
- Quick-view top screen
- Clear information at a glance from multiple angles

## Reliable Screen

- Gorilla Glass
- Scratch-resistance, anti-impact, anti-fingerprint and oil resistance

- Industrial LCD
- Service life over 30,000h

## Diverse Connections

Sensors: 6-axis E-compass, barometer, gyroscope, accelerometer, proximity sensor, Ambient light sensor

Positioning systems: GPS, BDS, GLONASS

Wired connection: accessory pins; Wireless connection: WLAN, NFC and BT



# Highlights



## Broadband and Narrowband Converged

Narrowband can switch between digital and analog operation while broadband supports all available mobile networks. The two systems collaborate to guarantee smooth communications.



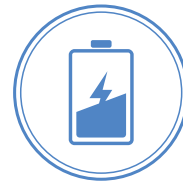
## Crystal Clear Critical Voice

Advanced audio technology, such as triple mic noise suppression, acoustic echo cancellation and wind noise suppression, to ensure you can receive and transmit clear voice communications even in noisy environments.



## Multiple Security Assurances

The device supports authentication and both software and hardware encryption to prevent voice and data theft. The management system monitors the radio in real-time and the device can be stunned, killed, or data erased if there is any user abnormality.



## Quick Charging

Equipped with the latest in smart battery technology, the PDC760 delivers quick charging, three times faster than regular batteries. 80% of the battery's capacity can be charged in just 30 minutes while a full



## Open APIs to Enrich Services and Applications

Secondary Development Kits (SDKs) are available to third-party developers allowing organizations to customize applications to meet the unique demands of their users. Consequently, all mobile resources can be integrated into this single work platform allowing for customization that turns your PDC760 multi-mode radio into your smart mobile device.



## Customized Network Priority

You can set priorities of varied networks based on your requirements. If there are services from different networks at the same time, the radio first processes the one from the network with higher priority. The service from the network with higher priority can interrupt the one from the network with lower priority. It guarantees that you can pick up every important call.

# Applications

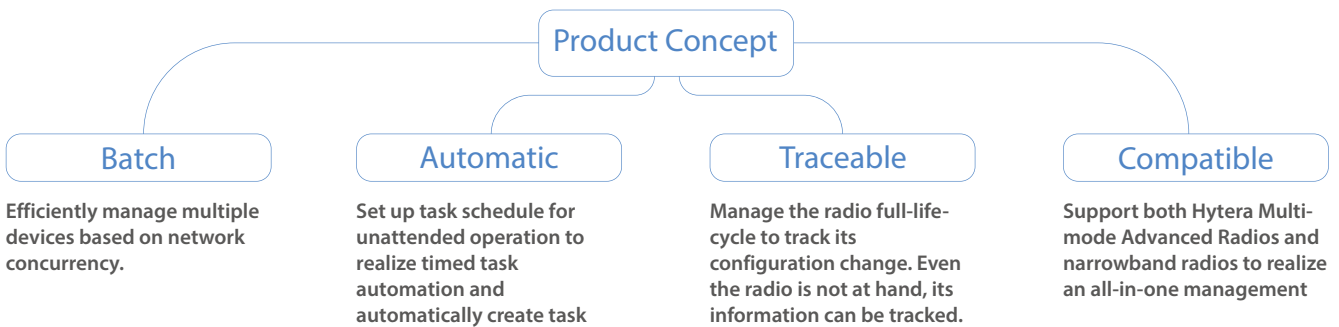


# Hytera Smart MDM – Efficient, Smart and Secure, With Total Control



The Hytera Smart Mobile Device Management (MDM) fully utilizes broadband capacity to facilitate your device management. The Hytera MDM is a mobile device management system that configures and manages Hytera Multi-mode Advanced Radios efficiently. It offers batch programming, upgrade, encryption, permission control, App and file push through WLAN and LTE network. Through a wireless network, the Hytera MDM solution can deliver concurrent operations, flexible remote-site control, and timely push actions to improve operational efficiency and reduce costs associated with device management.

The Hytera MDM also provides a full-life-cycle asset management system. The administrator can remotely track the working status of any device anywhere and anytime.



## Highlights

### Efficient Batch Programming and Upgrade

Manage large fleet of radios concurrently to improve programming and upgrade efficiency.

### Effective Data Collection and Security Analysis

Collect various radio data including parameters, configuration and diagnosis logs to monitor radio and eliminate security threats.

### Rich Third Party APIs

Provide third party APIs for various service extensions such as cloud storage, streaming media, and interfacing with other systems.

### Quick Configuration and OTAP Programming

Utilize the high-speed and reliable message channel between the radio and the console to enable or disable multiple settings such as GPS, BT, WLAN and NFC, and conduct OTAP of the radio through broadband.

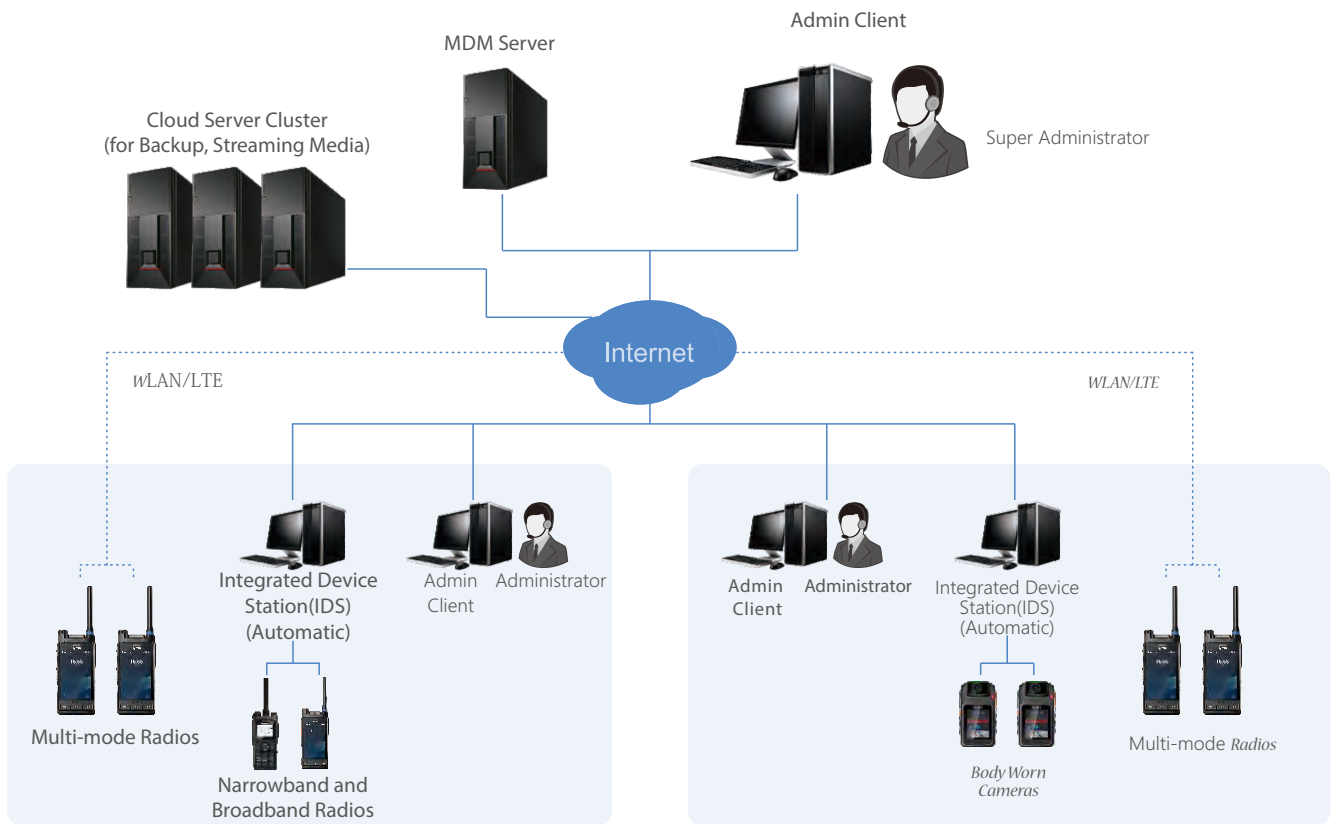
### Multiple Group and Permission Control

Support multiple roles and hierarchical group management to clearly classify the permission and work range for better collaboration.

### Diversified Services

Control application installation and uninstallation, license authorization, remote notification to the radio and file transmission. If the radio is compromised, the system is able to remotely erase sensitive data to avoid information leakage.

# System Topology

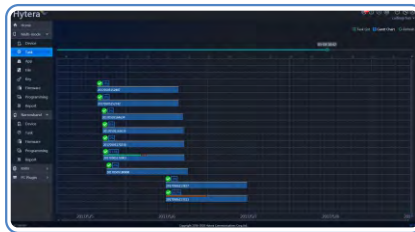


# System Functions



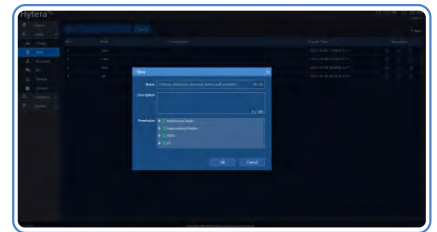
## • Asset

Asset management to set up archives for each radio.



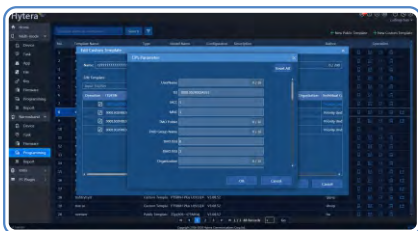
## • Task Gantt Chart

Visible Gantt chart to clearly display task progress.



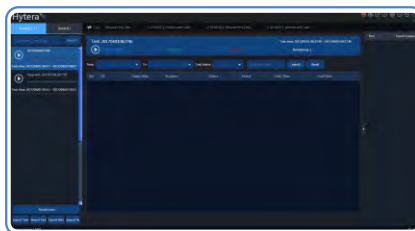
## • Role Permission

Different roles for administrators to conduct different management services.



## • Programming Template

Programming template management to create parameter sets for radio configuration.



## • IDS

Unattended work station to process tasks and manage radios by batch concurrently.



## • Report

Generate reports for all-round tasks statistics and tracking.

# Specifications

## Wireless Data Communication

|                    |  |
|--------------------|--|
| DMR Analog         | ETSI DMR Tier II/III<br>UHF: 350-527 MHz VHF: 136-174 MHz                |
| LTE                | FDD-LTE: B2/B3/B4/B5/B7/B12/B13/B17/B20/B25/B26/B27<br>TDD-LTE: B41      |
| CDMA               | CDMA 1xRTT BC0/BC1/BC10(SEC800)<br>CDMA2000 1xEV-DO BC0/BC1/BC10(SEC800) |
| WCDMA              | B2/B4/B5   |
| GSM                | 850/900/1800/1900MHz   |
| WLAN               | 802.11 b/g/n, 2.4GHz   |
| NFC                | 13.56MHz   |
| Dual BT            | V4.2 LE+EDR  |
| Positioning System | GPS, GPS/BDS, GPS/GLONASS  |

## General Specifications

|                                 |  |
|---------------------------------|--|
| Dimensions (H x W x D)          | 139.5 x 68 x 25.3mm  |
| Weight (with antenna & battery) | 378g   |
| AP Processor                    | Qualcomm 8-core, 2.0GHz  |
| Memory                          | <b>Broadband</b><br>RAM: 3GB<br>ROM: 32GB eMMC<br>Expandable to 128GB with Micro SD card<br><b>Narrowband</b><br>Expandable to 16GB with Micro SD card |
| Ports                           | USB 2.0<br>20PIN Accessory/Charging Port   |
| Top Display                     | 1.0" Color: black & white  |
| Main Display                    | 4.0" 800x480<br>Capacitive, Touch screen, Gloves Compatible  |
| Front Camera                    | 13MP Auto Focus  |
| Rear Camera                     | 13MP Auto Focus  |
| Operating Voltage               | 7.6V(Rated)  |
| Sensors                         | Proximity Sensor<br>Ambient Light Sensor<br>6-axis E-Compass<br>Barometer<br>Gyroscope<br>Accelerometer  |

## Battery

|              |  |
|--------------|--|
| Standard     | 2900 mAh Li-polymer  |
| Optional     | 4000 mAh   |
| Battery Life | Standard Battery : 14h<br>12h voice(5:5:90)+2h video<br>Optional Battery : 20h<br>18h voice(5:5:90)+2h video |

## Transceiver

|                                  |   |
|----------------------------------|---|
| Channel Spacing                  | 25/20/12.5kHz   |
| TX Power                         | UHF: 1W/4W  |
| RX Sensitivity                   | <b>Analog:</b><br>0.3µV(12dB SINAD)<br>0.22µV(12dB SINAD)(Typical)<br>0.4µV(20dB SINAD)<br><b>Digital:</b><br>0.3µV/BER5% |
| Inter-modulation                 | TIA-603: 70dB@12.5/20/25kHz<br>ETSI: 65dB@12.5/20/25kHz   |
| Blocking                         | 84dB  |
| Suppression of Spurious Response | TIA_603: 70dB@12.5/20/25kHz<br>ETSI: 70dB@12.5/20/25kHz   |
| Frequency Stability              | ±0.5ppm   |
| Antenna Impedance                | 50Ω   |
| Audio Output                     | 2W(Rated)   |
| Audio Distortion                 | ≤3%   |
| Microphone                       | NRR: 30dB(Static),<br>20dB(Non-static)<br>AEC: > 60dB   |
| Digital Vocoder Type             | AMBE+2™   |

## Android Software

|                  |                                |
|------------------|--------------------------------|
| Operating System | Android 7.0                    |
| UI               | HUI, Customized user interface |

## Video and Imaging

|                         |  |
|-------------------------|--|
| Video File Types        | 3GPP(.3gp), MPEG-4(.mp4), QuickTime(.mov), WEBM(.webm), Windows Media(.asf,.wmv), RealMedia(.rmvb, .rm), MPEG-PS(.mpg, .mpeg), MPEG-TS(.ts), AVI(.avi), Matroska(.mkv) |
| Image File Types        | JPEG(.jpg), GIF(.gif), PNG(.png), BMP(.bmp)  |
| Video Recording Quality | Front Camera: 1080P HD up to 30 frames per second(fps)<br>Rear Camera: 4K HD   |
| Watermark               | Video and imaging  |

## Audio

|            |   |
|------------|---|
| File Types | MP3(.mp3), WAV(.wav), 3GPP(.3gp), MPEG-4(.mp4,.m4a), ATDS raw AAC(.aac), MPEG-TS(.ts), FLAC(.flac), MIDI(.midi, .xmf, .mxmf), RTTTL/RTX(.rtttl, .rtx), OTA(.ota), iMelody(.imy), Ogg(.ogg), Matroska(.mka), QCELP(.qcp), RealMedia(.ra), Windows Media(.wma), AC3(.ac3) |
| Input      | Triple Mic Noise Suppression<br>Wind Noise Suppression<br>Echo Cancellation   |

## Environment Performance

|                       |                |
|-----------------------|----------------|
| Dust and Water Proof  | IEC 60529-IP67 |
| Shock and Vibration   | MIL-STD-810 G  |
| Operating Temperature | -20°C +60°C    |
| Storage Temperature   | -30°C +80°C    |

## Rich Features and Applications

| Work Mode   | Voice Service  | Security  | Apps   |  |
|---|--|---|--|--|
| Digital Conventional<br>Analog Conventional<br>DMR Trunking<br>MPT Trunking<br>Public Network | Pgroup Call<br>Private Call<br>All Call<br>Broadcast Call<br>Emergency Call<br>Public Phone Call<br>PSTN/PABX Call<br>Alert Call | Alert Call<br>Remote Monitor<br>Priority Interrupt<br>Override/Interrupt<br>Call Queuing<br>Call Priority | Emergency Alarm<br>Stun/Kill/Revive<br>Radio Check<br>Man Down<br>Lone Worker<br>Authentication<br>Over the Air Encryption<br>Analog Scrambler | Contacts<br>Messaging<br>Camera<br>Gallery<br>Sound Recorder<br>Files<br>Documents<br>Notes<br>Calendar<br>Clock<br>Calculator<br>Browser<br>Compass |
| Data Service  | Audio  | Others  |  |  |
| Text Message<br>Status Message<br>MMS<br>Clarity Transmission<br>Data Query                   | Microphone Gain Control<br>Audio Feedback Suppression<br>Microphone Path Set<br>Speaker Path Set<br>Three-band Equalizer<br>VOX  | Positioning<br>Scan and Roaming<br>Covert Mode  |  |  |

## Optional Accessories



Body Worn Camera



Body Worn Camera with LCD



Remote Speaker Microphone



Covert Camera



4000mAh Smart Battery



Carkit



Fast Charger



Multi-unit Charger



BT Heart Rate Earpiece



Transparent Earpiece



Wired Earset

## Standard Accessories

Smart Battery (2900mAh Li-polymer)

Belt Clip

Power Adapter

Antenna

Color Ring

Charger

Strap



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