



# Digital Migration Radio PD485

- Clear Audio
- Built-in Bluetooth and GPS option
- Analogue and Digital Auto Detect





## Features

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**ANALOGUE & DIGITAL AUTO DETECT**  
 Compatible with analogue conventional and digital conventional modes. Allows PD485 to simultaneously monitor analogue and digital modes and automatically respond in each mode. Extremely easy migration to digital from analogue.
- 📡
**DTMF SIGNALING**
- ☰
**DUAL CAPACITY DIRECT MODE**  
 In direct mode, you can have two voice calls simultaneously, because of the two timeslots from DMR TDMA technology. This feature can be used to increase the radio capacity at no extra cost, without the need for additional frequency licenses.
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**PRIVACY (Optional)**  
 Basic end-to-end Encryption has your voice and data transmission secured.
- 📞
**EMERGENCY ALARM/CALL**  
 Emergency Alarm can be sent to other radios via the one touch programmable button, establishing an emergency call in a specific group. Improves your emergency response time.
- 📡
**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.
- 🕒
**REAL TIME CLOCK**  
 Ensures the real time is displayed on the menu and GPS/messaging.
- RRS
**RADIO REGISTRATION SERVICE**  
 RRS allows the PD485 to communicate with Smart Dispatch and SmartOne, so that the dispatcher can check if the radio is on or offline.
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**SUPPLEMENTARY FEATURES (Optional)**  
 The PD485 can provide radio enable/disable, remote monitor and priority interrupt as optional features.
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**ROAMING (Optional)**  
 Roam from each repeater site to have a non-stop voice transmission.
- 📶
**GPS POSITIONING (Factory Optional)**  
 The built-in GPS module and GPS antenna are designed for outdoor positioning, making it the ideal tool to support location based requirements.
- 📶
**BUILT-IN BLUETOOTH (Factory Optional)**  
 Built-in Bluetooth supports PD485 wireless audio accessories and other Bluetooth transmissions.
- 🛡️
**RELIABLE AND DURABLE**  
 The PD485 is compliant with Mil-STD-810 G and IP54.
- 🎧
**VOX**  
 This feature allows you to activate the radio microphone at speaking volume, so that you do not need to press the PTT.

## Target Markets



### FLEET MANAGEMENT

With RRS, the PD485 can be accessed by dispatch applications for effective radio fleet management. Whether it's voice dispatching, SDS messaging or location based services, the PD485 is ideal for team communications.



### COMMERCIAL

Clear digital voice processors and powerful audio output ensures you receive your transmission even in noisy environments. Use the wireless earpiece or other audio accessories to improve your operating experience.



### SECURITY

Privacy in any voice or data communication is essential for security teams. Emergency call, priority interrupt and remote monitor functions provide a reliable communication system to support security staff who always need to remain alert and connected.



### OUTDOOR ADVENTURES

Flexible to program through the front panel and built to military standards, achieving IP54 rating for water and dust ingress protection, the PD485 is ready for your next adventure.

## Standard



Li-ion Battery  
(2000mAh)  
BL2010



Belt Clip  
BC19



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



Stubby Antenna



Switching Power Adapter



Hand Strap

## Options

Options available for the PD485:

- EAM12**: Detachable Transparent Acoustic Tube Earpiece with PTT&MIC cable
- EAM13**: 2-wire Surveillance Earpiece with VOX & Transparent Acoustic Tube (Black)
- SM26M1**: Remote Speaker Microphone without emergency button (IP54)
- PC76**: Data Programming Cable
- LCY015**: Nylon Carrying Jacket
- CH10A06**: Dual Pocket MCU Charger Kit (for Li-Ion/Ni-MH Batteries) (charger + power supply cable)
- MCA08**: MCU Multi-unit Rapid rate Charger
- EHM19**: C Style Earloop Earpiece with On-MK PTT
- EHM20**: Swivel Earpiece with PTT&MIC cable
- ESM12**: Earbud with On-MK PTT and VOX switch
- Antenna**: Standard antenna

# Specifications

General	
Frequency Range	UHF: 350-470MHz VHF: 136-174MHz
Channel Capacity	256
Zone Capacity	16
Channel Spacing	25/12.5KHz
Operating Voltage	7.4V
Battery	2000mAh (Li-Ion)
Battery Life (5/5/90)	Analogue/Digital: 12/16 hours
Weight	308g
Dimensions	117x55x37mm
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
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

PD48X, 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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Hytera reserves the right to modify the product design and the specifications. In case of a printing error, Hytera does not accept any liability. All specifications are subject to change without notice.

Encryption features are optional and have to be configured separately. They are also subject to European export regulations.

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