



## PD985

Our latest DMR handheld radio

The new PD985 from Hytera is the latest edition to the world's most comprehensive DMR portfolio. Offering an exceptional digital experience, with a vast array of enhanced features, the PD985 is the perfect solution for improving user efficiency and safety in any industry.



# Radio

## PD985/PD985G DMR handheld radio



### Highlights

#### 1. Single Frequency Repeater Mode

This feature allows your device to be used, alternatively, as a repeater, enabling your communications to go further. Based on interference cancellation techniques, the PD985 uses one slot to receive a signal, and another to transmit it in the same frequency, while using DMO mode to extend the communication distance.

#### 2. Longer Battery Life

The all new Smart Battery of the PD985 mean that this two-way radio device can be used even on long shifts, and the user is able to monitor the battery status. Consequently, the PD985 charging time is dramatically decreased.

#### 3. Advanced Noise Cancellation Technology

Offering an exceptional audio experience, the PD985 boasts new noise cancellation technology, allowing users to hear, and speak, clearly, even in loud environments.

#### Advanced Features Explained:

- **Full Duplex:** PD985 enables frontline personnel to make full duplex calls between other PD985 radios, PABX, PSTN and mobile phones
- **Single Frequency Repeater Mode:** The PD985 is able to use one slot to receive a signal and another slot to transmit it on the same frequency using DMO mode to extend radio coverage.
- **Built-in Bluetooth 4.0:** With integrated Bluetooth 4.0, the PD985 not only supports audio transmit, but it will also allow programming via Bluetooth.
- **Noise Cancellation and 2.5W Audio Output:** Maximum 2.5W output speaker and new noise cancelling technology ensures clear and loud voice communication.
- **IP68 Protection:** Complies with the highest dust and waterproofing standard to confront the harshest environments The radio continues to function after submersion in fresh water down to 2 meters for up to 4 hours.
- **Smart Battery:** This feature makes it easier to monitor the battery status, such as battery life time and charging time, and will reduce the charging time.
- **Audio Recording via Micro SD card:** The PD985 supports up to a 32GB Micro SD card, to record up to 576 hours of digital / analogue audio.
- **Safety features:** Man down, lone worker and emergency mode are included as standard to protect user wellbeing.
- **Full suite of DMR Services:** including remote monitor, remote enable/disable and call alert





**In the box**



Belt Clip BC19



Lithium-Ion Battery (2000mAh) BL2016



RO04 - Leather Wrist Strap



MCU Rapid-Rate Charger CH10A07



Universal Standard Switching Power Adapter PS1044

**Optional accessories**



Remote Speaker Microphone (IP57) SM18N2



C-Earset EHN16



Swivel Earset EHN17



Battery Optimizing System MCA05



MCU Multi-unit Charger (for Thick Battery) MCA08



3-Wire Surveillance Earpiece with Transparent Acoustic Tube (Beige) EAN17

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

Contact your dealer for more accessories information.

## Technical Data

General data		
General	Frequency Range	UHF: 350-527MHz
	Channel Capacity	1024
	Zone Capacity	64 (maximum of 128 channels per zone)
	Channel Spacing	12.5KHz / 20KHz / 25KHz
	Operating Voltage	7.4V (rated)
	Battery	2000mAh (Li-Ion)
	Battery Life (5-5-90 Duty Cycle, High TX Power) High-capacity 2000mAh Li-Ion Battery	Analogue: 14.5h Digital: 19.5h
	Frequency Stability	±0.5ppm
	Antenna Impedance	50 Ω
	Dimensions (H × W × D) (with standard battery, without antenna)	131 X 54.5 X 36mm
	Weight (with antenna & standard battery)	335
	LCD Display	160 × 128 pixels, 65535 colors 1.8 inch, 4 rows
	Receiver	Sensitivity
Digital 0.22 µV /BER5%		
Selectivity TIA-603 ETS C		60dB @ 12.5KHz / 70dB @ 20/25KHz 60dB @ 12.5KHz / 70dB @ 20/25KHz
Spurious Response Rejection TIA-603 ETSIC		70dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz
Blocking TIA-603 ETSI		84dB
Hum and Noise		40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz
Rated Audio Power Output		3W
Rated Audio Distortion		≤ %
Audio Response		+1 ~ -3dB
Conducted Spurious Emission		< -57dBm

Transmitter		
RF Power Output	UHF High Power: 4W UHF Low Power: 1W	
FM Modulation	11K0F3E @ 12.5KHz 14K0F3E @ 20KHz 16K0F3E @ 25KHz	
4FSK Digital Modulation	12.5KHz Data Only: 7K60FXD 12.5KHz Data & Voice: 7K60FXW	
Modulation Limiting	±2.5KHz @ 12.5KHz ±4.0KHz @ 20KHz; ±5.0KHz @ 25KHz	
FM Hum & Noise	40dB @ 12.5KHz 43dB @ 20KHz 45dB @ 25KHz	
Adjacent Channel Power	60dB @ 12.5KHz; 70dB @ 20/25KHz	
Audio Response	+1 ~ -3dB	
Audio Distortion	≤ 3%	
Digital Vocoder Type	AMBE++ or SELPor NVOC	
Digital Protocol	ETSI-TS102 361-1,-2,-3	
Environmental Specifications	Operating Temperature	-30 °C ~ +60 °C
	Storage Temperature	-40 °C ~ +85 °C
	ESD	IEC 61000-4-2 (level 4) ±8kV (contact) ±15kV (air)
	American Military Standard	MIL-STD-810 C/D/E/F/G
	Dust & Water Intrusion	IP68 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	Accuracy specs are for long-term tracking (95th percentile values >5 satellites visible at a nominal -130dBm signal strength)	
	TTF (Time To First Fix) Cold Start	<1 minute
	TTF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<10 meters

## Features

### Base Information

- Full Keypad, Colour Screen, 1024 Channels
- Analogue and Digital Dual Mode
- Bluetooth (4.0) Audio (PD985G)
- Bluetooth (4.0) Data\* (PD985G)
- Integrated GPS (PD985G)
- Integrated GLONASS (PD985G)
- Pre-programmed Text Messaging
- Freeform Text Messaging
- Option Board
- Roaming
- Scan
- Channel Change Voice Notification

### Audio

- Auto Gain Control
- Acoustic Feedback Suppressor
- Loudness Quality Optimization
- Multi Band Equalization\*
- Noise Cancellation Technology

### NOTES

\* Features will be available from Q2 2017

- Standard feature
- Optional feature

### Safety

- Emergency Alarm
- Dedicated Emergency Button
- Alert Call
- Man Down
- Lone Worker
- Basic Encryption
- Enhanced Encryption(40bit)
- Enhanced Encryption(128/256bit)
- Multiple Key Encryption
- Priority Interrupt
- Remote Monitor
- Radio Enable/Disable
- Radio Check
- IP68 Dust and Waterproof
- Vibrate Alert
- GPS SMS (PD985G)
- GPS Location check (PD985G)

### Systems

- Analogue Conventional
- DMR Conventional
- IP Site Connect
- MPT-1327
- DMR Simulcast System
- XPT Trunking
- DMR Trunking

### Advanced Features

- Pseudo Trunk
- Telemetry
- Rent
- Phone Interconnect
- Full Duplex Call (DMR Tier 3 System)
- Full Duplex Call (DMR Conventional System)
- Single Frequency Repeater Mode
- Audio Recording Capability via Micro SD Storage Card
- Smart Battery
- RTC Clock

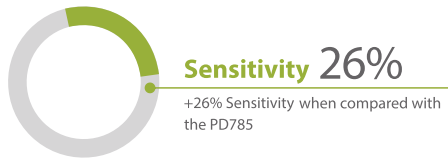
# PD985 Highlight

## Hardware Advantages



### Better Sensitivity and Frequency Stability

Advanced technology improves receiving performance to enhance communication distance and reliability.



### IP68 Protection

IP68 Dust and Waterproof Standards ensures outstanding performance, even in harsh environments.



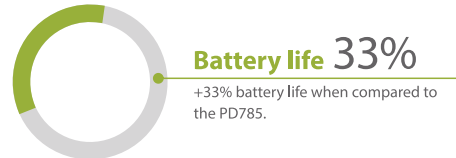
### Enhanced Voice Quality

Maximum 3W output speaker and new noise cancelling technology ensures clear and loud voice communication.



### Longer Battery Life

PD985 adopts new battery saving technology to guarantee longer communication time.



### 360 Degree Stepless Channel Knob

New control to change channels and zones easily and comfortably.

Your Hytera partner:



### Hytera Communications Corporation Limited

**Address:** Hytera Communications (UK) Co. Ltd.  
Hytera House, 939 Yeovil Road, Slough, Berkshire. SL1 4NH, UK.  
**Tel:** +44 (0) 1753 826 120 **Fax:** +44 (0) 1753 826 121  
**www.hytera.co.uk** **info@hyterauk.co.uk**

Further information can be found at:

[www.hytera.co.uk](http://www.hytera.co.uk)

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