



## **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 means 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 metres 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



(2000mAh) BI 201



RO04 - Leather Wrist Strap



Charger CH10A07



Universal Standar Switching Power

## **Optional accessories**



Microphone (IP57) SM18N2



C-Earset FHN16



SWIVELEARS FHN17



Battery Optimising



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**

G	eneral data		
	Frequency range		VHF: 136 - 174MHz, UHF: 350 - 527 MHz
	Channel capacity		1024
	Zone capacity		64 (with max. 256 channels each)
	Channel spacing		12.5 kHz / 20 kHz / 25 kHz
	Operating voltage		7.4 V (rated)
	Battery Life (5-5-90 Duty Cycle, High TX Power) High-capacity 2000mAh Li-lon Battery		Analogue: 14.5h Digital: 19.5h
	Frequency stability		± 0.5 ppm
	Antenna impedance		50 Ω
	Dimensions (W × H × D) (with standard, without antenna)		131 × 54.5 × 36mm
	Weight (with antenna & standard battery)		335 g
	LCD Display		160 x 128 pixels, 65535 colours 1.8 inch, 4 rows
	Sensitivity	Analogue	0.22 μV
		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 ETS C		70dB @ 12.5KHz / 20 / 25KHz 70dB @ 12.5KHz / 20 / 25KHz
	Blocking TIA-603 ETS C		84dB
	Hum and Noise		40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz
	Rated Audio Power Output		3W
	Rated Audio Distortion		≤ 96
	Audio Response		+1 ~ -3dB
	Conducted Spurious Emission		< -57dBm

Transmitter				
	RF Power Output	UHF High Power: 4W; UHF Low Power: 1W		
	FM Modulation	11 K0F3E at 12.5 kHz 14 K0F3E at 20 kHz 16 K0F3E at 25 kHz		
	4FSK digital modulation	12.5 kHz (data only): 7K60FXD 12.5 kHz (data and voice): 7K60FXW		
	Modulation limiting	± 2.5 kHz at 12.5 kHz ± 4.0 kHz at 20 kHz ± 5.0 kHz at 25 kHz		
	FM Hum and noise	40 dB at 12.5 kHz 43 dB at 20 kHz 45 dB at 25 kHz		
	Adjacent Channel Power	60 dB at 12.5 kHz; 70dB @ 20/25KHz		
	Audio Response	+ 1 to - 3dB		
	Audio Distortion	≤3%		
	Digital vocoder type	AMBE++ or SELP or NVOC		
	Digital Protocol	ETSI-TS102 361-1,-2,-3		
	Operating Temperature	-30°C ~ +60°C		
	Storage Temperature	-40°C ~ +85°C		
Environmental Specifications	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 traching (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength)		
	TTFF (Time To First Fix) Cold Start	< 1 minute	
	TTFF (Time To First Fix) Hot Start	< 10 seconds	
	Horizontal Accuracy	< 10 metres	

## Features \* Features will be available from Q2 2017 • Standard feature • Optional feature

### **Base Information**

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

#### Audio

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

## 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)
- o GPS Location Check (PD985G)

## Systems

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

## **Advanced Features**

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



## **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.hvtera.co.uk info@hvtera.co.uk













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

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