

 SERIES

Hytera 



**ENRICHING YOUR DIGITAL EXPERIENCE**  
**NEW MEMBER TO WORLD'S MOST COMPLETE DMR PORTFOLIO**  
**PD982  SERIES**

[www.hytera.us](http://www.hytera.us)



## PD982i Highlight Brand New Features

# 01

### Micro SD Card

PD982i uses micro DS storage technology to allow recording and storage of critical voice calls or data transmissions.

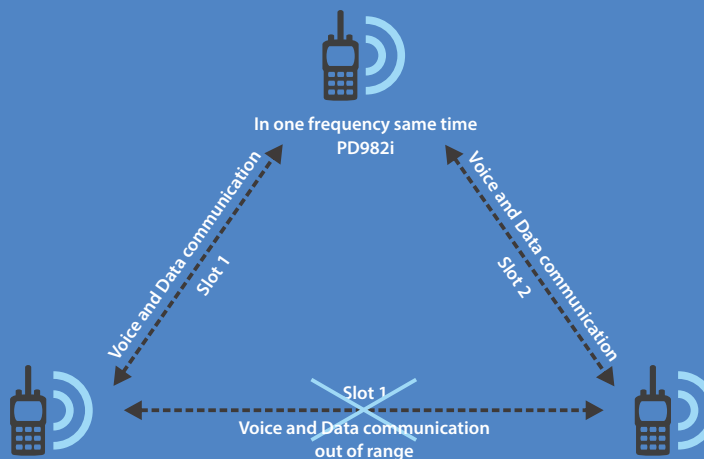
PD982i supports maximum 32G micro SD card, to record up to 576 hours digital/ analog voice.



# 02

### Single Frequency Repeater Mode

Using interference cancellation technique, PD982i can use one slot to receive signal and another slot to transmit it on the same frequency at the same time, extending communications distance in DMO mode.



# 03

### Bluetooth 4.0

PD982i has built in Bluetooth 4.0, which not only supports audio transmission, but also allows data transmission, such as programming via Bluetooth etc.

# 04

### Full Duplex Call

PD982i can make full duplex calls with other PD982i, telephones or cellphones.

# 05

### RTC Clock

RTC clock feature allows customers to check the accurate time of received message and call.

# 06

### Smart Battery

Compared with PD782i, PD982i support smart battery, which makes it easier to monitor the battery status, such as battery life time and remaining charge time by smart battery charge. This also reduces the charging time dramatically.



**Centered Antenna**

Integrated GPS and RF antenna, more accurate positioning and receiving.



**360 Degree Seamless Channel Knob Turn**

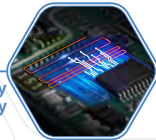


**1.8 Inch High Definition Display**

Displaying clear contents.



**IP68 Protection**



**Better Sensitivity and Frequency Stability**



**Enhanced Voice Quality**



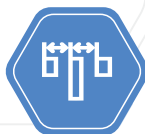
**Longer Battery Life**



**Bluetooth 4.0**



**Micro SD Card**



**Single Frequency Repeater Mode**



**Full Duplex Call**



**RTC Clock**



**Smart Battery**

# PD982i Highlight Hardware Advantages



## Better Sensitivity and Frequency Stability

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



**Sensitivity 26%+**

Compared with PD782i the PD982i adopts a brand new hardware design that provides an increase in receiver sensitivity of more than 26%



## Longer Battery Life

PD982i adopts new battery saving technology to guarantee longer communication time.



**Battery life 33%+**

Compared with PD782i the PD982i adopts new battery saving technology that provides an increase in battery life of more than 33%



## IP68 Protection

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



## 360°Seamless Channel Knob Turn

With this kind of knob, users can change channels and zone more quickly, enhancing the user experience.



## Enhanced Voice Quality

Maximum 2.5W output speaker and new noise cancelling technology ensures clear and loud voice communication.

### Noisy environment

Figure 1 Without noise cancellation



Figure 2 With noise cancellation



### Windy environment

Figure 1 Without echo cancellation

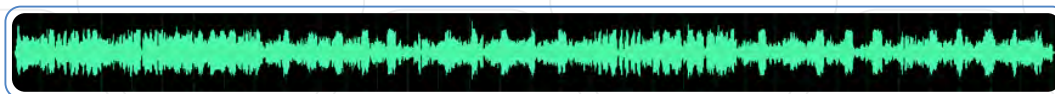


Figure 2 With echo cancellation



# Product Features

- Over-the-air Alias**  
 PD982i can support sending radio alias over the air when PTT. The radio receives the call can decide to create a new contact or overwrite the old one automatically. It gives a great convenience to the customer to manage the fleet with the correct contact stored in each radio without touching each unit for programming.
- OTAP**  
 OTAP for Conventional Repeater System: Over the Air Programming modifies the parameters of remote terminals through the air interface signaling, including digital conventional channel parameters and part parameters of the terminal. It saves time and manpower to operate and maintain a radio system.
- Enhanced Quick GPS**  
 Enhanced Quick GPS: Compressed GPS data can be packaged in a single frame to greatly increase the capacity up to 450 units/min, which is tripled in DMR Tier II system. This enhancement improves channel efficiency for data and reduce hardware cost.
- Trunked & Conventional Switch**  
 Trunking & Conventional Switch: By pressing a single button or twisting the channel knob, it enables radios to be switched between trunking and conventional mode without restarting. During this process, registration & deregistration in trunking system is done automatically, and over the air authentication is still available.
- Voice with GPS**  
 PD982i is able to transmit GPS data in the same channel during transmitting voice. This gives the customer an option to upload location information once pushing to talk. It helps to target where the speaker is immediately.
- Optimized Push-to-talk**  
 It allows a radio to set up audio buffer and store what the user speaks before the call is established. Then it sends the stored audio together with the coming real-time audio after the call is established. Therefore, users can talk right after pressing PTT without waiting for the "go-ahead tone". This feature also enhances the handover function without dropping communications in Tier III system during sites switch.
- Out-of-range Notification in RMO**  
 Out-of-range Notification in RMO: A radio is always notified when it has left the repeater coverage. The users can realize if they are in the talk range all the time by paying attention to the alert tone.
- Offline GPS Data**  
 Offline GPS Data Storage: The radio model with micro SD card inside can store offline GPS data now when you are not in the system coverage. Getting back to the office, it's quite easy to export the offline data to the dispatch system to record the history track of a radio.
- Full Duplex Call**  
 Full Duplex Call in RMO: Simultaneous voice transmission and reception in full duplex call now is available in Repeater Mode Operation (RMO) and Direct Mode Operation (DMO). It greatly enlarges full-duplex coverage beyond Trunking Mode Operation (TMO); long calls are made hands-free and much more efficiently between radios, and even between radios and phones.
- Over-the-air Encryption**

## Optional Accessories



Remote Speaker Microphone (IP57) SM18N2



C-Earset EHN16



Swivel Earset EHN17



Earbud ESN12



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



Receive-only Earpiece ESS08



Six-Unit Switching Power Supply PS7002



Programming Cable (USB Port) PC38



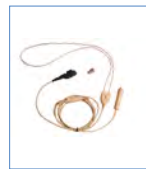
Battery Optimizing System MCA05



MCU Multi-unit Charger (for Thick Battery) MCA08



3-wire Surveillance Earpiece with Transparent Acoustic Tube(Black) EAN18



2-wire Earpiece with Wireless Earphone and Neck Loop(Beige) EWN06



Receive-only Earpiece ESS07

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

Contact your dealer for more accessories information.

# Features

## Base Information

- Full Keypad, Color Screen, 1024 Channels
- Analog and Digital Dual Mode
- Bluetooth (4.0) Audio
- Bluetooth (4.0) Data
- Integrated GPS
- Integrated GLONASS
- Pre-programmed Text Messaging
- Freeform Text Messaging
- Option Board
- Roaming
- Scan
- Voice Notification

## Audio

- Auto Gain Control
- Acoustic Feedback Suppressor
- Multi Band Equalization
- Noise Reduction Technology

## Notes

- \* These features require a license key to activate
- Standard feature
- Optional feature

## Safety

- Emergency Alarm
- Dedicate 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
- Vibration
- GPS SMS
- GPS Location check

## Systems

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

## Advance Features

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



# Specifications

General	Frequency Range	136-174MHz, 350-520MHz, 806-941M	
	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	Analog:14.5h Digital: 19.5h	
	Frequency Stability	±0.5ppm	
	Antenna Impedance	50Ω	
	Dimensions (H X W X D) (with standard battery, without antenna)	131 X 54.5 X 36mm	
	Weight (with antenna & standard battery)	12 oz.	
	LCD Display	160 X 128 pixels, 65535 colors 1.8 inch, 4 rows	
	Receiver	Sensitivity	Analog
Digital			0.22 μV /BER5%
Selectivity TIA-603 ETSI C		60dB @ 12.5KHz / 70dB @ 20/25KHz	
		60dB @ 12.5KHz / 70dB @ 20/25KHz	
Spurious Response Rejection TIA-603 ETSI C		70dB @ 12.5/20/25KHz	
		70dB @ 12.5/20/25KHz	
Blocking TIA-603 ETSI		84dB	
		84dB	
Hum and Noise		40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz	
Rated Audio Power Output		0.5W	
Rated Audio Distortion	≤ 3%		
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+2™		
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)		
	TTFF (Time To First Fix) Cold Start	<1 minute	
	TTFF (Time To First Fix) Hot Start	<10 seconds	
	Horizontal Accuracy	<10 meters	



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