





ENRICHING YOUR DIGITAL EXPERIENCE NEW MEMBER TO WORLD'S MOST COMPLETE DMR PORTFOLIO PD982 2 SERIES

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## 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.

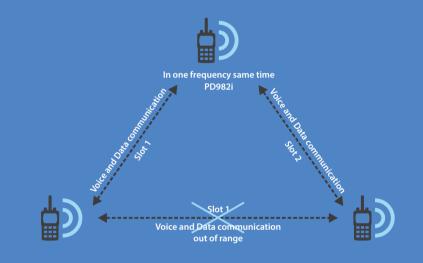
PD982i supports maximum 32G micro SD card, to record up to 576 hours digital/ analog voice.



## 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.



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#### **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.



#### Full Duplex Call

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

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#### **RTC Clock**

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

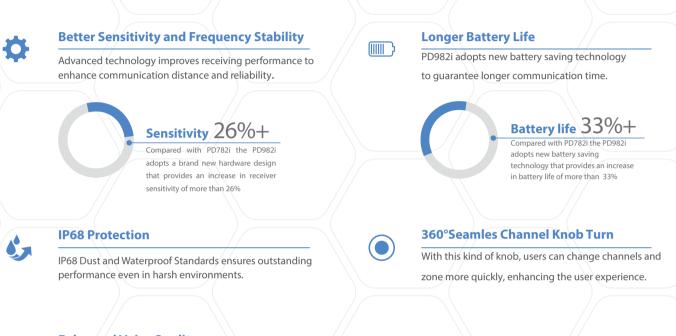
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#### **Smart Battery**

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.



## PD982i Highlight Hardware Advantages



**Enhanced Voice Quality** 

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

**Noisy environment** 

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Figure 1 Without noise cancellation

Figure 2 With noise cancellation

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Windy environment

Figure 1 Without echo cancellation

Figure 2 With echo cancellation

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## **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 Ouick 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-theair Encryption** 

## **Optional Accessories**



Remote Speaker Microphone (IP57) SM18N2



Battery Optimizing System MCA05



MCU Multi-unit Charger 3-wire Surveillance (for Thick Battery)

MCA08



EAN18



Earbud

ESN12

2-wire Earpiece with Earpiece with Transparent Wireless Earphone and Acoustic Tube(Black) Neck Loop(Beige) EWN06



3-Wire Surveillance

Earpiece with Transparent

Acoustic Tube (beige)

EAN17

Receive-only

Earpiece

ESS07

ESS08



Receive-only Earpiece Six-Unit

Switching Power Supply PS7002

Contact your dealer for more accessories information.



Programming Cable (USB Port) PC38

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

## 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

#### 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

#### 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



## **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-lon Battery		Analog:14.5h Digital: 19.5h
	Frequency Stability		±0.5ppm
	Antenna Impedance		50Ω
	Dimensions ( $H \times W \times D$ ) (with standard battery, without antenna)		131 X 54.5 X 36mm
	Weight (with antenna & standard battery)		12 oz.
	LCD Display		160×128 pixels, 65535 colors 1.8 inch, 4 rows
Receiver	Sensitivity	Analog	0.22µV
		Digital	0.22 µ V /BER5%
	Selectivity TIA-603 ETS 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
	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

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 TM
Digital Protocol	ETSI-TS102 361-1,-2,-3
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

	Accuracy specs are for long-term tracking(95th percentile values>5 satellites visible at a nominal -130dBm signal strength)		
GPS	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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