

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

Audio

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

NOTES

- * Those feature will be available later by software upgrade
- Standard feature
- Optional feature

Safety

- Explosion-proof
- 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

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

Advance Features

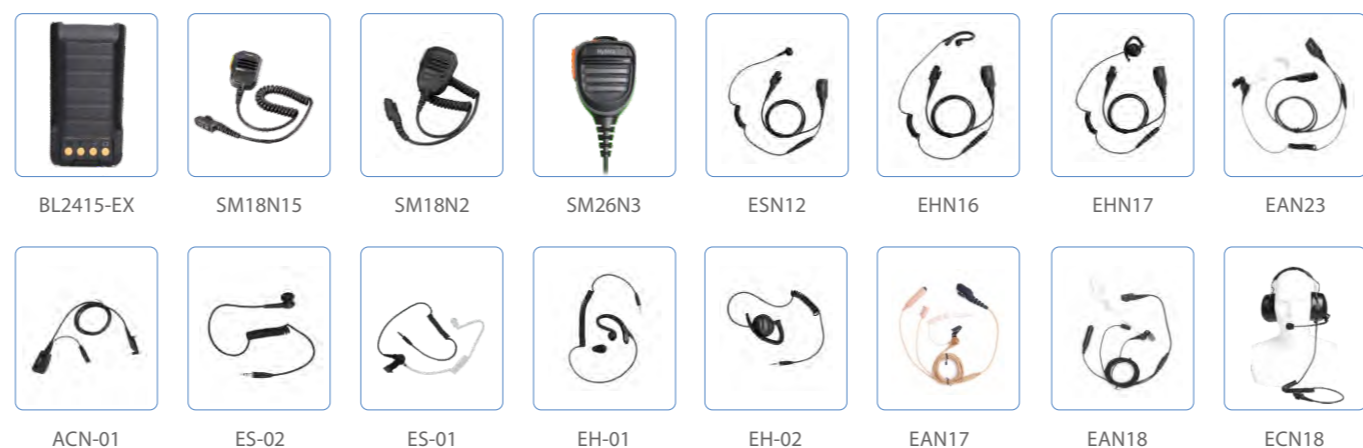
- Pseudo Trunk
- Telemetry
- Rent
- Phone Interconnect
- Full Duplex Call (DMR Tier 3 System) Full Duplex Call (DMR Conventional System)
- Single Frequency Repeater Mode Micro SD Card
- Smart Battery
- RTC Clock

Specifications

General	Frequency Range	UHF:350-527MHz VHF:136-174MHz		
	Channel Capacity	1024		
	Zone Capacity	64 (maximum of 256 channels per zone)		
	Channel Spacing	12.5kHz / 20kHz / 25kHz		
	Operating Voltage	7.4V (rated)		
	Battery	2400mAh (Li-ion Anti-fake or Smart Battery)		
	Battery Life (5-5-90 Duty Cycle, High TX Power)	Digital: 21 Hours @2400mAh	Analog: 16.5 Hours @2400mAh	
	Frequency Stability	±0.5ppm		
	Antenna Impedance	50Ω		
	Dimensions (H×W×D) (with standard battery, without antenna)	131 x 54.5 x 42 mm (2400mAh)		
Weight (with antenna & standard battery)	366g			
LCD Display	160 x 128 pixels, 65536 colors 1.8 inch, 6rows			
Receiver	Sensitivity	Analog	0.22μV (12dB SIN AD), 0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)	
		Digital	0.22μV /BER5%	
	Selectivity TIA-603 ETSI	60dB @ 12.5kHz / 70dB @ 20/25kHz (TIA-603) 60dB @ 12.5kHz / 70dB @ 20/25kHz (ETSI)		
	Spurious Response Rejection TIA-603 ETSI	70dB @ 12.5/20/25kHz (TIA-603) 70dB @ 12.5/20/25kHz (ETSI)		
	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		

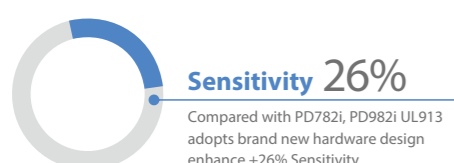
Transmitter	RF Power Output	UHF High Power: 4W; UHF Low Power: 1W VHF High Power: 5W; VHF Low Power: 1W
	FM Modulation	11K0F3E @ 12.5kHz 14K0F3E @ 20kHz 16K0F3E @ 25kHz
	4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data & Voice: 7K60FXW
	Modulation Limiting	±2.5kHz @ 12.5kHz ±4.0kHz @ 20kHz ±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 NVOOC
	Digital Protocol	ETSI-TS102 361-1,-2,-3
Environmental Specifications	Operating Temperature	-30°C ~ +55°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
GPS	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	TTF (Time To First Fix) Cold Start	<1 minute
	TTF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<5 meters

Optional Accessories

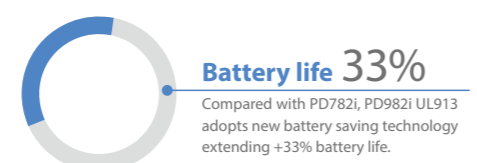


PD982i UL913 Highlight Hardware Advantages

Better Sensitivity and Frequency Stability
Advanced technology improves receiving performance to enhance communication distance and reliability.



Longer Battery Life
PD982i UL913 adopts new battery saving technology to guarantee longer communication time.



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

360 Degree Stepless Channel Knob
With this kind of knob user can change channel and zone easily and comfortably.

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



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PD982i UL913

Intrinsically Safe Powerful Digital Radio
UL/TIA4950 Certified explosion-proof DMR Portable Two-way Radio





PD982i(UL913)

As the most compacted explosion-proof digital two-way radio Today, safety is the most important thing we are asking for in every aspect of life and work. Hytera understands the challenges in hazardous environments and is dedicated to designing and developing safer radios for more and more customers. Hytera believes it is rather urgent to provide an intrinsic safety radio to commercial market. Build a radio with the classic housing to provide a small and light product. Design a radio to pass UL913 certification for most dangerous areas with explosive gas and combustible dusts. Introduce a cost-effective radio with much more features for enterprises and commercial users.

Target market

Oil & Gas, Refinery, Chemical Industry, Fire Fighting



PD982i(UL913) in this document are intrinsically safe, they are different from the conventional types.

UL913/TIA4950 Certificate

UL

Class I III DIV 1 Group C-G T4

Atmosphere
Class I: Gas, vapors;
Class II: Dust;
Class III: Fibers, flyings

Gas types by group:
A: Acetylene B: Hydrogen
C: Ethylene and related products
D: Propane and alcohol products

Dust types by group
E: Metal dust
F: Coal dust
G: Grain and non-metallic dust

Area classification: (flammable material present time)
NEC 500
Division 1: gas / dust normally present in explosive amounts
Division 2: gas / dust not normally present in explosive amounts

Temperature class(maximum device surface temperature):
T1: 450°C T3A: 180°C T4: 135°C
T2: 300°C T3B: 165°C T5: 100°C
T3: 200°C T3C: 160°C T6: 85°C

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

360 Degree Stepless Channel Knob

IP68 Protection

Enhanced Voice Quality

Hytera 18' High Definition Display
Displaying clear contents.

Better Sensitivity and Frequency Stability

Explosion-proof High capacity Li-ion Battery

Bluetooth 4.0

Micro SD Card

Single Frequency Repeater Mode

Full Duplex Call

RTC Clock

Smart Battery

PD982i UL913 Highlight Brand New Features

01

Micro SD Card

Based on micro SD storage technology, PD982i UL913 helps customer to record and store critical voice call or data.

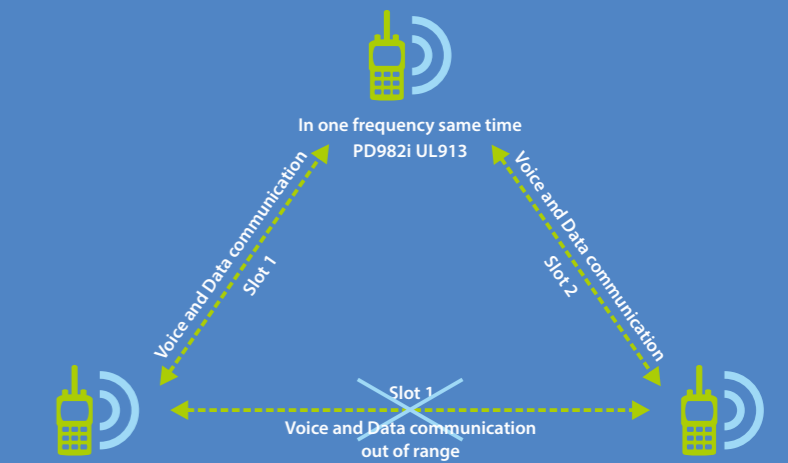
PD982i UL913 supports maximum 32G micro SD card, to record up to 576 hours digital/ analog voice.



02

Single Frequency Repeater Mode

Based on Interference cancellation technique, PD982i UL913 can use one slot to receive signal and another slot to transmit it in the same frequency at the same time in DMO mode to extend communication distance.



03

Bluetooth 4.0

PD982i UL913 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 UL913 can make full duplex call with PD982i UL913, telephone or cell phone.

05

RTC Clock

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

06

Smart Battery

Compared with PD78X UL913, PD982i UL913 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.