

## 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

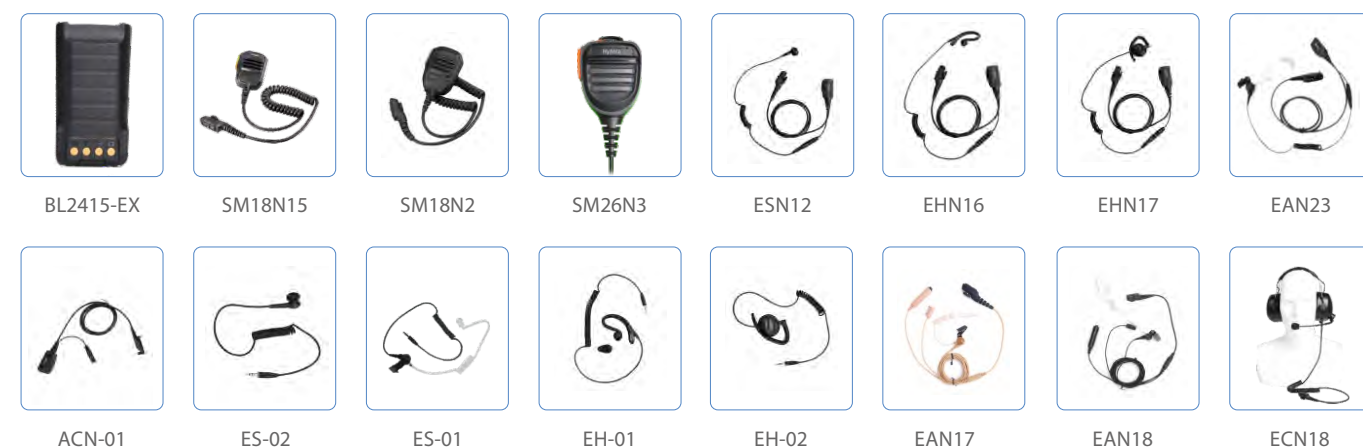
- Pseudo Trunk
- Telemetry
- Rent
- Phone Interconnect
- Full Duplex Call (DMR Tier 3 System) Full Duplex Call (DMR Conventional System )
- Single Frequency Repeater Mode Micro SD Card
- Smart Battery
- RTC Clock

## 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	TTFF (Time To First Fix) Cold Start	<1 minute	
	TTFF (Time To First Fix) Hot Start	<10 seconds	
	Horizontal Accuracy	<5 meters	

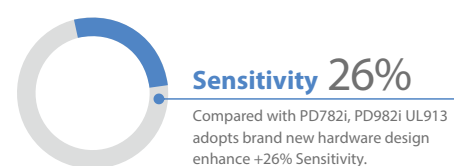
## Optional Accessories



## PD982i UL913 Highlight Hardware Advantages

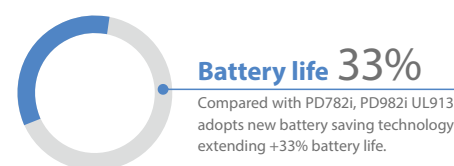
**Better Sensitivity and Frequency Stability**

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.



**MYRO Inc.**  
301 Enterprise St. Ste. 2  
Escondido, CA 92029  
(615)763-3430  
www.myradiooutlet.com  
myro@edgetechinc.com



## PD982i UL913

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



**i** SERIES







## 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.



### 03

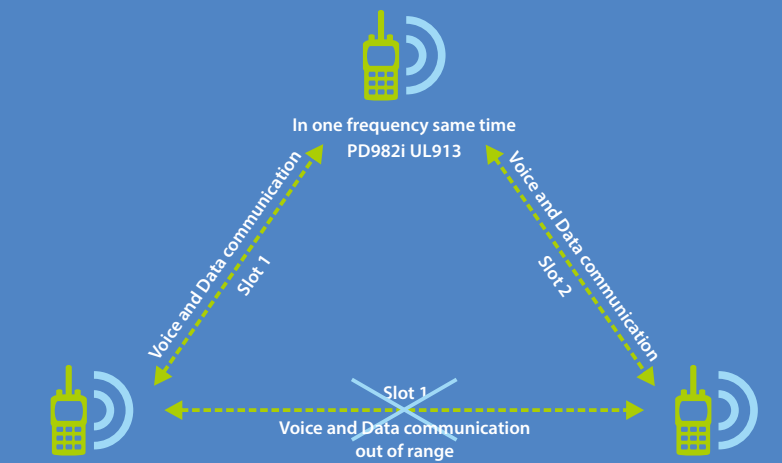
#### Bluetooth 4.0

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.

### 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.



### 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.