



PD782

Digital Portable Two-Way Radio
with Display, Keypad, and GPS (Optional)



As a product built to the DMR standard, the PD782 combines spectral efficiency, a compact, yet durable design with versatile digital functions such as secure communication, texting, and data management. The Hytera PD782 Series brings you a NEW cutting edge technology at an exceptional value.



**STANDARD
3 YEAR
WARRANTY**

GPS Model (PD782G) Available

IP57-Rated: Submersible for up to 30 Min in 1M of Water

Large Color LCD Allows for a Full View of Messages & Alerts

Narrow-Band Compliant with the FCC 2013 Mandate

Hytera
Digital Value is Here



Product Highlights



Ergonomic Design

A compact and light weight structural design makes the PD782 easy to carry and operate.

A large-sized HD color LCD display and big push-buttons facilitate your access to various functions.

The globally patented antenna design ensures convenient operation and remarkable GPS performance.

Rugged and Submersible

PD782/782G is strictly compliant with MIL-STD-810 C/D/E/F and IP57 standards, ensuring outstanding performance even in extreme environments.

Superior Audio

With the combined application of narrowband codec and digital error-correction technologies, PD782/782G is capable of ensuring you superior audio under noisy environments or at the edge of the coverage area. In addition, the adoption of the AGC technology also



optimizes your voice and with the built-in 1W speaker, PD782/782G ensures clear and crisp voice communication.

Durable Battery

Compared with an analog radio, PD782/782G can obtain an extra 40% operation time between charges at the same output power.**

Spectrum Efficiency

Benefitting from the TDMA technology, PD782/782G allows twice the channels based on the same spectrum resource. This is a huge relief due to the increasing shortages in spectrum resources.

Dual-Slot Pseudo Trunking

With this feature, the free slot can be allocated to a member that needs to communicate on the same channel. This enhances the frequency efficiency and allows you to communicate at all times.



Secure Communication

Besides the intrinsic encryption of the digital technology, PD782/782G provides enhanced encryption capability (such as 256-bit encryption algorithm) and the Scrambler feature (selectable).

Versatile Functionalities

In addition to conventional communication, the PD782/782G features versatile digital functions such as Message, Scan, Emergency, Man Down (optional), Auto Registration*, High-speed Data Transmission* and Lone Worker*.

Expansion Port

The reserved port in the PD782/782G allows users or a third party to further develop other helpful functions (Message, GPS, Call Control and Telemetry).

* Indicates functions available in later version.
**Using 5:5:90, 5sec Backlight, 1:1Battery Saving, Tx High Power, & no GPS.

Additional Features

Dual Modes (Analog+Digital)

PD782/782G can operate in either analog or digital mode. It is compatible with the prevalent analog systems, allowing for a smooth analog-to-digital transition.

Versatile Voice Calls

Intelligent signaling options of PD782/782G supports various call types, including Private Call, Group Call and All Call.

Vibrate

This feature is helpful in alerting you to reception of any voice or message under noisy or low-volume conditions.

GPS

PD782G supports viewing of GPS positioning information and sending of GPS text message.

IP Service*

PD782/782G allows multiple IP functions if connected with a PC via IP address.

Various Analog Signaling Types

PD782/782G supports various analog signaling types (HDC1200, DTMF*, 2-Tone* and 5-Tone*).

Multiple Languages

PD782/782G supports 10 languages (English, Simplified Chinese, Traditional Chinese, German*, Spanish*, French*, Italian*, Polish*, Russian* and Turkish*), allowing you to select as per your needs.

Messaging

The PD782 can transmit and receive short text messages and predefined status messages.

Emergency

The PD782 is equipped with multiple emergency alarm methods such as Man Down (optional) and Silent Emergency, enabling you to get instant help in the case of a critical event.

Scan

Allows you to listen/communication activities on other channels to you can keep a close track of your team members.

Software Upgradable

With this capability, you can enjoy further features available in later versions without buying a new radio.

* Indicates functions available in later version.

Mechanical Design Features



Standard Accessories

Li-Ion Battery	Power Adapter	MCU Rapid-rate Charger	Belt Clip	Leather Strap	Antenna
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Optional Accessories

Remote Speaker Microphone (IP57) SM18N2	Earpiece with On-MIC PTT & Transparent Acoustic Tube EAN16	D-earset with In-Line Microphone EHN12	Earbud with On-MIC PTT ESN10	3-Wire Surveillance Earpiece w/ Transparent Acoustic Tube (beige) EAN17	Six-Unit Switching Power PS7002	Carrying Case (for thick battery) (leather) (swivel) LCY003	Programming Cable (USB Port) PC38

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

Specifications

General	
Frequency Range	VHF: 136-174MHz UHF1: 400-470MHz
Channel Capacity	1024
Zone Capacity	64 (each with a max of 16 channels)
Channel Spacing	25 /20/12.5 KHz
Operating Voltage	7.4V (rated)
Battery	2000mAh(Li-Ion)
Battery Life (5-5-90 Duty Cycle, High TX Power, No GPS, & 1:1 Battery Saving)	Analog: Above 14 Hours Digital: Above 16 Hours
Frequency Stability	±1.5ppm
Antenna Impedance	50Ω
Dimensions (H×W×D) (with standard battery, without antenna)	125×55×37 mm / 4.921×2.165×1.458 inches
Weight (with antenna & standard battery)	355g /0.78lb
Front Case	PC
LCD Display	160×128 pixels, 65535 colors 1.8 inch, 4 rows

Receiver	
Sensitivity (Analog)	0.3μV (12dB SINAD) 0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)
Sensitivity (Digital)	0.3μV/BER5%
Selectivity TIA-603 ETSI	60dB @ 12.5 kHz / 70dB @ 20/25 kHz 60dB @ 12.5 kHz / 70dB @ 20/25 kHz
Intermodulation TIA-603 ETSI	70dB @ 12.5/20/25 kHz 65dB @ 12.5/20/25 kHz
Spurious Response Rejection TIA-603 ETSI	70dB @ 12.5/20/25 kHz 70dB @ 12.5/20/25 kHz
S/N	40dB @ 12.5 kHz 43dB @ 20 kHz 45dB @ 25 kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤3%
Audio Response	+1~-3dB
Conducted Spurious Emission	<-57 dBm

GPS (for PD782G only)	
TTFF (Time To First Fix) Cold Start	<1 minute
TTFF (Time To First Fix) Hot Start	<10 seconds
Horizontal Accuracy	<10 meters (32.8 feet)

Transmitter	
RF Power Output	VHF High Power: 5W VHF Low Power: 1W UHF High Power: 4W UHF Low Power: 1W
FM Modulation	11KφF3E @ 12.5 kHz 14KφF3E @ 20 kHz 16KφF3E @ 25 kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data & Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm<1GHz -30dBm>1GHz
Modulation Limiting	±2.5kHz @ 12.5 kHz ±4.0kHz @ 20 kHz ±5.0kHz @ 25 kHz
FM Noise	40dB @ 12.5 kHz 43dB @ 20 kHz 45dB @ 25 kHz
Adjacent Channel Power	60dB @ 12.5 kHz 70dB @ 20/25kHz
Audio Response	+1 ~ -3dB
Audio Distortion	≤3 %
Digital Vocoder Type	AMBE++ or SELP
Digital Protocol	ETSI-TS102 361-1, 2&3

Environmental Specifications	
Operating Temperature	-30°C ~ +60°C -22°F ~ +140°F
Storage Temperature	-40°C ~ +85°C -40°F ~ +185°F
ESD	IEC 61000-4-2 (level 4) 8kV (contact) 15kV (air)
American Military Standard	MIL-STD-810 C/D/E/F
Dust & Water Intrusion	IP57 Standard
Humidity	Per MIL-STD-810 C/D/E/F Standard
Shock & Vibration	Per MIL-STD-810 C/D/E/F Standard

All Specifications are tested according to applicable standards, and subject to change without notice due to continuous development.

Applicable Military Standards

American Military Standard	810C		810D		810E		810F	
	Method	Procedure	Method	Procedure	Method	Procedure	Method	Procedure
Low Pressure	500.1	I	500.2	I, II	500.3	I, II	500.4	II
High Temperature	501.1	I, II	501.2	I, II	501.3	I, II	501.4	I, II
Low Temperature	502.1	I	502.2	I, II	502.3	I, II	502.4	I, II
Temperature Shock	503.1	I	503.2	I	503.3	I	503.4	I
Solar Radiation	505.1	I	505.2	I	505.3	I	505.4	I
Rain	506.1	II	506.2	II	506.3	I, II	506.4	I, II
Humidity	507.1	II	507.2	II, III	507.3	II, III	507.4	I, II
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	I
Sand & Dust	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII, X	514.3	I	514.4	I	514.5	I/24
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV	516.5	I, IV



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