# Standard Accessories

# Optional Accessories















# **Specifications**

General						
Frequency Range	VHF: 136-174MHz UHF1: 400-470MHz UHF3: 350-400MHz					
Channel Capacity	1024					
Zone Capacity	64 (each with a maximum of 16 channels)					
Channel Spacing	25 /20/12.5 KHz					
Operating Voltage	7.4V (rated)					
Battery	2000mAh(Li–lon)					
attery Life (5-5-90 Duty Cycle, HighTX Power) High-capacity 2000mAh Li-lon Battery	Analog: Above 10.5 Hours Digital: Above 14 Hours					
Frequency Stability	± 1,5ppm					
Antenna Impedance	<b>50</b> Ω					
Dimensions (H×W×D) (with standard battery, without antenna)	125×55×37 mm /4.921×2.165×1.458 inch					
Weight (withantenna &standard battery)	355g /0.78lb					
Front Case	PC					
LCD Display	160×128 pixels, 65536 colors 1.8 inch, 4 rows					

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Front Case	PC				
LCD Display	160×128 pixels, 65536 colors 1.8 inch, 4 rows				
	Receiver				
Sensitivity (Analog)	0.3 μ <b>V (12dB SINAD)</b> 0.22iV (Typical) (12dB SINAD) <b>0.4</b> μ <b>V (20dB SINAD)</b>				
Sensitivity (Digital)	0.3 μ V/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 PD788Gonly)					
TTFF (Time To FirstFix) Cold Start					
TTFF (Time To FirstFix) Hot Start	<10 seconds				
Horizontal Accuracy	<10 meters				

Transmitter							
RF Power Output	VHF High Power:5W VHF Low Power:1W UHF1/UHF3 High Power:4W UHF1/UHF3 Low Power:1W						
FM Modulation	11K						
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data & Voice: 7K60FXW						
	-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	<b>≤3</b> %						
Digital Vocoder Type	AMBE++ or SELP						
Digital Protocol	ETSI-TS102 361-1, 2&3						

Environmental Specifications						
Operating Temperature	-30°C ~ +60°C					
Operating Temperature	–40℃ ~ +85℃					
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					

### Applicable Military Standards

American Military Standard			810D		810E		810F	
Test Items								
Low Pressure	500.1	1	500.2	1,11	500.3	1, 11	500.4	П
High Temperature	501.1	I, II	501.2	I, II	501.3	I, II	501.4	I, II
Low Temperature	502.1	1	502.2	1,11	502.3	1, 11	502.4	1,11
Temperature Shock	503.1	1	503.2	1	503.3		503.4	1
Solar Radiation	505.1	1	505.2	1	505.3	1	505.4	1
	506.1		506.2		506.3	I, II	506.4	I, II
Humidity	507.1	II	507.2	II, III	507.3	II, III	507.4	
	509.1		509.2		509.3		509.4	
Sand & Dust	510.1	1	510.2	1	510.3	1	510.4	1
Vibration	514.2	VIII, X	514.3		514.4		514.5	1/24
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV	516.5	I, IV





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Hytera Communications Corporation Limited

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# PD788/PD788G

Versatile Digital Portable Two-Way Radio

As a product built to the DMR standard, PD788/788G (PD788G is the model with GPS) is endowedwith ergonomic design, allround digital functions and remarkable quality to refresh your experience and enable you to be responsive to emergent situations.



- Large-size HD Transflective Color Display
- Superior Digital Voice











#### Product Features)



## **Ergonomic Design**

The large-size color display allows good visibility even under extremelystrong light. The globally patented industrial design and antenna design ensure convenient operation and remarkable GPS performance.

#### Reliable Quality

PD788/788G is strictly compliant with MIL-STD-810 C/D/E/F and IP57 standards, ensuring outstanding performance even under harsh environments.

#### Superior Voice

With the combined application of narrowband codec and digital error-correction technologies, PD788/788G is capable of ensuring you superior voice under noisy environments or at the edge of the coverage area. In addition, the adoption of the AGC technology also optimizes your voice. With a built-in 1W speaker, PD788/788G ensures clear and crisp voice communication.



# **Durable Battery**

Compared with an analog radio, PD788/788G can obtain an extra 40% operation time.

# Higher Spectrum Efficiency, Higher Channel Capacity

Benefiting from the TDMA technology, PD788/788G allows twice the channels based on the same spectrum resource. This is a big help to relieve the stress of increasing shortage in spectrum resource.

#### Dual-slot Pseudo Trunking

With this feature, the free slot can be allocated to a member that needs to communicate, effectively enhancing frequency efficiency and allowing you to communicate timely under emergent situations.



#### Secure Communication

Besides the intrinsic encryption of the digital technology, PD788/788G provides enhanced encryption capability (such as 256-bit encryption algorithm) and the Scrambler feature (selectable).

#### Versatile Services

In addition to conventional communication services, PD788/788G features rich data services and selectable functions such as Message, Scan, Emergency, Man Down (optional), Auto Registration\*, High-speed Data Transmission\* and Lone Worker\*.

## Further Development Port

The reserved port in PD788/788G allows users or any third party to further develop other helpfulfunctions (Message, GPS, Call Control and Telemetry).

#### Main Functions >>

- Dual Modes (Analog+Digital)
  PD788/788G can operate in either analog or digital mode. It is compatible with the prevalent analog system, ensuring a smooth analog-to-digital transition.
- Versatile Voice Calls
  - Intelligent signaling of PD788/788G supports various voicecall types, including Private Call, Group Call and All Call.
- Vibrate
- This feature ishelpful in alerting youto reception of any voice or message under noisy or low-volume conditions.
- ▶ GP
  - PD788G supports viewing of GPS positioning information and sending of GPS text message.
- ▶ IP Service\*
- PD788/788G allows multiple IP functions if connected with a PC via IP address.
- Various Analog Signaling Types
- PD788/788G supports various analog signaling types (HDC1200, DTMF\*, 2-Tone\* and 5-Tone\*), providing higher function expansion capacity.
- Multiple Languages
- PD788/788G supports 10 languages (English, Simplified Chinese, Traditional Chinese, German, Spanish, French, Italian, Polish, Russian and Turkish), allowing you to select asper your needs.
- ▶ Software Upgradable
- With this capability, you can enjoy further features without buying a new machine.

\* indicates functions available in later version.

# Industrial Design Features >>



<sup>\*</sup> indicates functions available in later version