Specifications

General		
Frequences		UHF1: 400-470MHz; UHF2: 450-520MHz; UHF3: 350-400MHz; VHF: 136-174MHz
Channel Capacity		1024
Zone Capacity		64(each with a maximum of 16 channels)
Channel Spacing		12.5 KHz / 20 KHz / 25 KHz
Operating Voltage		7.4V (rated)
Battery		2000mAh (Li-Ion)
Battery Life (5-5-90 Duty Cycle, High TX Power) High-capacity 2000mAh Li-Ion Battery		Analog: UHF1: 13.5 h 12 h (G) Digital: UHF1: 15.5 h 14 h (G) UHF2: 12.5 h 11 h (G) UHF2: 14.5 h 12.5 h (G) UHF3: 12.5 h 11 h (G) UHF3: 4.5 h 12.5 h (G) VHF: 11 h 10 h (G) VHF: 13.5 h 12 h (G)
Frequency Stability		± 1.5ppm
Antenna Impedance		50 Ω
Dimensions (H × W × D) (with standard battery, without antenna)		125 X 55 X 37mm (4.9X2.2X1.5inch)
Weight (with antenna & standard battery)		355g (12.5oz)
LCD Display		160 × 128 pixels, 65535 colors 1.8 inch, 4 rows

Receiver		
Sensitivity	Analog	0.3 µ V (12dB SINAD);0.22 µ V (Typical) (12dB SINAD) 0.4 µ V (20dB SINAD)
	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
Blocking TIA-603 ETSI		80dB 84dB
Hum and Noise		-40dB @ 12.5 kHz;-43dB @ 20KHz; -45dB @ 25 kHz
Rated Audio Power Output		0.5W
Rated Audio Distortion		≤ 3%
Audio Response		+1 ~ -3dB
Conducted Spurious Emission		< -57 dBm

Transmitter	
RF Power Output	UHF1/UHF2/UHF3 High Power： 4W UHF1/UHF2/UHF3 Low Power： 1W VHF High Power： 5W； VHF Low Power： 1W
FM Modulation	11K0F3E @ 12.5 kHz; 14K0F3E @ 20 kHz 16K0F3E @ 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 Hum & Noise	-40dB @ 12.5 kHz; -43dB @ 20KHz; -45dB @ 25 kHz
Adjacent Channel Power	60dB @ 12.5 kHz; 70dB @ 20/25 kHz
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℃ ~ +60℃
Storage Temperature	-40℃ ~ +85℃
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	IP67 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard

GPS (For PD788G only)	Accuracy specs are for long-term tracking(95th percentile values>5 satellites visible at a nominal -130dBm signal strength)	
	TTFF (Time To First Fix) Cold Start	<1 minute
	TTFF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<10 meters

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

Standard Accessories

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

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 with Transparent Acoustic Tube (beige) EAN17

Six-Unit Switching Powe PS7002

Carrying Case (for thick battery) (leather) (swivel) LCY003

Programming Cable (USB Port) PC38

2500mAh Li-Ion Battery BL2503

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

Hytera
Respond & Achieve

PD788/788G

Versatile Digital Portable Two-Way Radio

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

DMR DIGITAL MOBILE RADIO ASSOCIATION

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PD788/788G
Higher Efficiency, Richer Experience

As a product built to the DMR standard, PD788/788G (PD788G is the model with GPS) is endowed with ergonomic design, all-round digital functions and remarkable quality to increase your management efficiency and enable you to be responsive to emergent situations.

Product Features

● **Ergonomic Design**
The large-size color display allows good visibility even under extremely strong 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/G and IP67 standards, ensuring outstanding performance even in 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 in 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 Trunk**
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 emergency 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 Text Message, Scan, Emergency, Man Down (optional), vibration Auto Registration, High-speed Data Transmission* and Lone Worker.

● **Further Development Port**
The reserved side port in PD788/788G allows users or any third party partner to further develop other helpful applications to extend the radio functionalities!

● **Option Board Interface**
PD788/788G supports option board interfaces to radio, allowing third party partner to develop various applications to interconnect with radios to control the radio to expand its functionalities! Among the supported features are voice recording, encryption* etc. Please refer to the API Partner Programmed for more information!

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 voice call types, including Private Call, Group Call , All Call and Emergency Call.

● **GPS**
PD788G supports viewing of GPS positioning information and sending of GPS text message.

● **Data Services**
PD788/788G supports data capabilities of sending Private, Group text message. It also supports Third Party to control the radio via Third party API (GPS, Radio Registration Services, Radio and Call Control, Telemetry*, DataTransfer*), via Telemetry control to radio.

● **Various Analog Signaling Types**
PD788/788G supports various analog signaling types (HDC1200, DTMF*, 2-Tone and 5-Tone), various squelch control types (CTCSS/CDCSS), thus providing higher function expansion capacity to the analog world.

● **Supplementary Services**
PD788/788G supports supplementary services of Radio Check, Remote Monitor, Call Alert, Radio Enable and Radio Disable.

● **Multiple Languages**
PD788/788G supports 11 languages (English, Simplified Chinese, Traditional Chinese, German, Spanish, French, Italian, Polish, Russian, Turkish and Korean), allowing users to select it per their needs.

● **One Touch**
PD788/788G supports One Touch features that comprise of Text Message, Voice Calls and Supplementary Services.

● **Scan**
PD788/788G supports scanning of pure analog voice and signaling, pure Digital voice and data, and also mix mode scan that comprise of Analog and Digital activities.

● **Roaming**
PD788/788G supports automatic roaming of all sites in a IP Multi-site Connect system.

● **Privacy of Voice and Data**
PD788/788G supports Analog scrambling, and digital encryption using Advanced Encryption Standard (AES) and ARCFOUR (ARC4) encryption methodology to both voice and data.

● **Analog/Digital Telephone Interconnect (via DTMF signaling)**
PD788/788G supports simplex voice communications between radio and telephone users. It allows a radio user to make a telephone call; or a telephone user to make either a Group or Private call to radio users. This feature utilizes the Commercial Off The Shelf (COTS) Analog Phone Patch boxes and a Plain Old Telephone Service (POTS) line to connect the radio users to the Corporate Office Phone System (PBX) or Public Switched Telephone Network (PSTN).

● **Software Upgradable**
With this capability, you can enjoy firmware upgrade without purchasing a new piece of radio hardware!

* indicates functions available in later version.

Applications

Public Safety	Public Utilities	Transportation (port, airport, railway, etc.)
Forest Industry	Business	Manufacturing