Optional Accessories

External Speaker SM09D1	Desktop Microphone SM10A1	Programming Cable (USB Port) PC37	Keypad Microphone SM19A1*	Antenna	300W Mobile power supply PS22002	Data Cable PC40

Pictures above are for refeence only and may vary fromactual products

Specifications

Specifications		
Frequency Range		VHF: 136-174MHz UHF1: 400-470MHz UHF3: 350-400MHz
Channel Capacity		1024
Zone Capacity		64(each with a maximum of16 channels)
Channel Spacing		25 /20/12.5 kHz
Operating Voltage		13.6V ± 15%
Current Drain	Standby	<0.6A
	Receive	<2.0A
	Transmit	<12A (45W/50W) <8A (25W)
Frequency Stability		± 1.5ppm
Antenna Impedance		50Ω
Dimensions (H*W*D)		60*174 *200 (mm) / 2.4 *6.9 *7.9 (inch)
Weight		1.7 kg / 3.75lbs
Front Case		PC+ABS
LCD Display		220*176 pixels, 262000 colors 2.0 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)
Sensitivity(Digital)		0.3 μ V/BER5%
Selectivity TIA-603 ETSI		65dB @ 12.5 kHz /75dB @ 20/25 kHz 60dB @ 12.5 kHz /70dB @ 20/25 kHz
Intermodulation TIA-603 ETSI		75dB @ 12.5/20/25 kHz 70dB @ 12.5/20/25 kHz
Spurious Response Rejection TIA-603 ETSI		75dB @ 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		3W
Rated Audio Distortion		≤3%
Audio Response		+1 ~ -3dB
Conducted Spurious Emission		< -57 dBm
GPS (For MD785Gonly)		
TTFF (Time To First Fix) Cold Start		<1 minute
TTFF (Time To First Fix) Hot Start		<10 seconds
Horizontal Accuracy		<10 meters

Transmitter	
RF Power Output	VHF High Power: 50W VHF Low Power: 25W UHF1 High Power:45W UHF1 Low Power: 25W UHF3:25W
FM Modulation	11KΦF3E @ 12.5 kHz 14KΦF3E @ 20 kHz 16KΦF3E @ 25 kHz
4FSK Digital Modulation	12.5KHz Data Only: 7K6ΦFXD 12.5kHz Data & Voice: 7K6ΦFXW
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 @ 20/25 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
Dust & Water Intrusion	IP54 Standard
Shock & Vibration	Per MIL-STD-810 C/D/E/F Standard
Humidity	Per MIL-STD-810 C/D/E/F Standard

All Specifications are testedaccording to applicable standards, and subject to change without notice dueto continuous development.

Applicable Military Standards 810C/D/E/F

American Military Standard / Test Items	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	
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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20101027R2V1(EN)

Hytera

MD785/MD785G

Versatile Digital Mobile Two-Way Radio

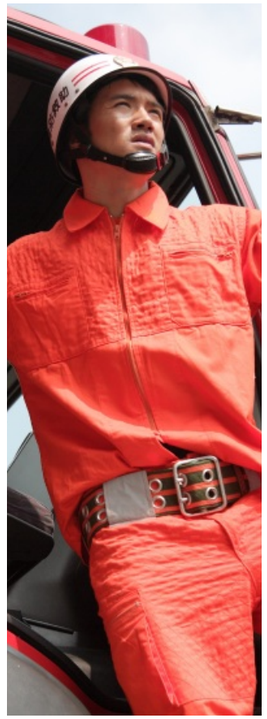
As a product built to the DMR standard, MD785/785G (MD785G is the model with GPS) is endowed with ergonomic design, all-round digital functions and remarkable quality to increase your management efficiency and enable you to be responsive to emergent situations.

- **Large-size High-definition Transflective Color Display**
- **Superior Digital Voice**

DMR DIGITAL MOBILE RADIO ASSOCIATION

TWO WAY RADIOS UK
HTTPS://TWOWAYRADIOSUK.CO.UK 01782537000

Higher Efficiency
Richer Experience



Product Features

User-centered Design

The large-size color display allows good visibility even under extremely strong light. And the seven programmable keys facilitate your communication in various conditions.

Reliable Quality

MD785/785G is strictly compliant with MIL-STD-810 C/D/E/F and IP54 standards, ensuring outstanding performance even under harsh environments.

Superior Voice

With the combined application of narrowband codec and digital error-correction technologies, MD785/785G 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 5W speaker, MD785/785G ensures clear and crisp voice communication.

Higher Spectrum Efficiency, Higher Channel Capacity

Benefiting from the TDMA technology, MD785/785G 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 emergent situations.

Secure Communication

Besides the intrinsic encryption of the digital technology, MD785/785G provides enhanced encryption capability (such as 256-bit encryption algorithm) and the Scrambler feature (selectable).

Versatile Services

In addition to conventional communication services, MD785/785G features rich data services and selectable functions such as Message, Scan, Emergency, Emergency Footswitch, Channel Steering, Auto Registration*, High-speed Data Transmission* and Lone Worker*.

Further Development Port

The reserved port in MD785/785G allows users or any third party to further develop other helpful functions (Message, GPS, Call Control and Telemetry).

* indicates functions available inlater version.

Main Functions

- **Dual Modes (Analog+Digital)**
  MD785/785G 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 MD785/785G supports various voice call types, including Private Call, Group Call and All Call.
- **GPS**
  MD785G supports viewing of GPS positioning information and sending of GPS text message.
- **IP Service***
  MD785/785G allows multiple IP functions if connected with a PC via IP address.
- **Various Analog Signaling Types**
  MD785/785G supports various analog signaling types (HDC1200, DTMF*, 2-Tone* and 5-Tone*), providing higher function expansion capacity.
- **Multiple Languages**
  MD785/785G supports 11 languages (English, Simplified Chinese, Traditional Chinese, German, Spanish, French, Italian*, Polish, Russian, Portuguese* and Turkish), allowing you to select as per your needs.
- **Software Upgradable**
  With this capability, you can enjoy further features without buying a new machine.

Industrial Design Features

Standard Accessories

Palm Microphone SM16A1	Microphone Hanger and Screws	Mounting Bracket Kit
GPS Antenna(For MD785Gonly)	Fuse	Power Cable

* indicates functions available in later version.