

## Standard Accessories



Palm Microphone SM16A1    Microphone Hanger and Screws    Mounting Bracket Kit    Fuse    Power Cord

## Optional Accessory



External Speaker SM09D1    Desktop Microphone SM10A1    Programming Cable (USB Port) Pc37    Data Cable    320W External Power Supply    Antenna for Mobile Radio    Palm Microphone with Keypad    GPS Mounting Kit

## Specifications

General		Transmitter			
Frequency Range	400-470MHz	RF Power Output	Low Power: UHF1 (400-470MHz), 5-25W; High Power: UHF1 (400-470MHz), 5-45W;		
Channel Capacity	256	FM Modulation	16KΦF3E @ 12.5 kHz 14KΦF3E @ 20 kHz 11KΦF3E @ 25 kHz		
Zone Capacity	32 (each with a maximum of 16 channels)	4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data & Voice: 7K60FXE		
Channel Spacing	25 /20/12.5 KHz	Spurious and Harmonics	-36dBm<1GHz -30dBm>1GHz		
Operating Voltage	13.6±15%	Modulation Limiting	±2.5kHz @ 12.5 kHz ±4.0kHz @ 20 kHz ±5.0kHz @ 25 kHz		
Current Drain	Standby (Max.)	FM Noise	40dB @ 12.5 kHz 43dB @ 20KHz 45dB @ 25 kHz		
	Receive (Max.)		Adjacent Channel Power	60dB @ 12.5 kHz 70dB @ 20/25KHz	
	Transmit (Max.)			Audio Response	+1 ~ -3 dB
Frequency Stability	±1.5ppm	Audio Distortion	≤3 %		
Antenna Impedance	50Ω	Digital Vocoder Type	AMBE++ /SELP		
Dimensions (W*H*L)	174 X 60 X 200 mm / 6.9*2.4*7.9 inch	Digital Protocol	ETSI-TS102 361-1, 2&3		
Weight	1.7 Kg /60 oz	Environmental Specifications			
Military Standard	MIL-STD-810C/D/E/F	Operating Temperature	-30°C ~ +60°C		
Front Case	PC+ABS	Storage Temperature	-40°C ~ +85°C		
LCD Display	220*176 pixels, 262000 colors	Dust & Water Intrusion	IP54 Standard		
Receiver		Shock & Vibration	Per MIL-STD-810 C/D/E/F Standards		
Sensitivity (Analog)	0.3μV (12dB SINAD) 0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)	Humidity	Per MIL-STD-810 C/D/E/F Standards		
	Sensitivity (Digital)	0.3uV/BER5%	All Specifications are tested according to applicable standards, and subject to change without notice due to continuous development.		
Adjacent Channel Selectivity TIA603 ETSI	65dB @ 12.5 kHz /75dB @ 20 & 25 kHz 60dB @ 12.5 kHz /70dB @ 20 & 25 kHz	<b>Applicable Military Standards 810 E1F</b>			
Intermodulation TIA603 ETSI	75dB @ 12.5/20/25 kHz 70dB @ 12.5/20/25 kHz	MIL-STD	810E	810F	
Spurious Response Rejection TIA603 ETSI	75dB @ 12.5/20/25 kHz 75dB @ 12.5/20/25 kHz	Method	Procedure	Method	Procedure
S/N	40dB @ 12.5 kHz 43dB @ 20 kHz 45dB @ 25 kHz	500.3	II	500.4	II
Rated Audio Power Output	3W	501.3	IIA, IIA1	501.4	I/Hot, II/Hot
Rated Audio Distortion	≤3%	502.3	III, III1	502.4	III, III1
Audio Response	+1 ~ -3 dB	503.3	IIA, IIC3	503.4	I
Conducted Spurious Emission	-57 dBm	505.3	I	505.4	I
		506.3	I, II	506.4	I, III
		507.3	II	507.4	-
		509.3	I	509.4	I
		510.3	I	510.4	I
		514.4	I/II, II/3	514.5	I/24
		516.4	I, IV	516.5	I, IV



# MD785

## Digital Mobile Radio

Fully compliant to the DMR standard, the MD785 keeps users well-informed in various scenarios, while offering a solution of efficient real-time communication and fleet management with versatile functionalities. This radio has an ergonomic design and a user-friendly interface. The MD785 is your way of optimizing your organization's efficiency on the job.



www.hytera.cn

Hytera Communication Corporation Limited

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## Additional Features >>

- ▶ **Versatile Voice Calls**  
Intelligent signaling of MD785 supports various voice call types, including Individual Call, Group Call, All Call & Late Entry.
- ▶ **Message**  
MD785 supports transmission and reception of text message.
- ▶ **Scan**  
This function allows you to listen to communication activities on other channels so that you can keep a close track of your team members.
- ▶ **DM & RM Operation Modes**  
RM: radios can communicate with each other via a repeater.  
DM: radios can communicate with each other directly.
- ▶ **Multiple Signalings Available**  
MD785 supports 2-Tone\*, 5-Tone\*, HDC1200\* and CTCSS/CDCSS.
- ▶ **12.5 /20 /25kHz Channel Spacing**
- ▶ **Emergency**  
MD785 is equipped with multiple emergency alarm methods such as Man Down and Silent Emergency, enabling you to get instant help in case of a critical event.
- ▶ **Sonorous Sound Output**  
MD785 can output sonorous sound with a built-in high-power loudspeaker (6W).
- ▶ **Software Upgradable**  
With this function, you can enjoy more powerful features without buying a new machine.

## Product Highlights >>



### Superior Voice

With the combined application of advanced codec and digital error-correction technology, MD785 is capable of ensuring you superior voice with a wider coverage.

### Dual Modes

MD785 can operate in either analog or digital mode. Accordingly, you can get rid of worries about its compatibility with the analog system that you are using, and just enjoy the benefits it brings.

### High Frequency Spectrum Efficiency

Benefiting from TDMA technology, MD785 allows twice the users to share the same channel. This is a big help to relieve the stress of increasing shortage in spectrum resource.

### Secure Communication

MD785 is furnished with enhanced digital encryption capability. Eavesdropping that haunts analog radio is no longer a problem, and your communication is fully secured.

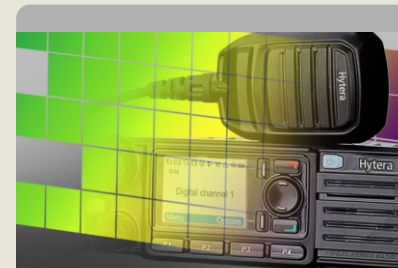


### Reliable Quality

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

### User-friendly UI and Button Design

MD785 is furnished with TFT high definition color LCD. With a large-sized keypad and six ergonomically designed programmable keys, you can achieve high-effective communication rapidly.



### Versatile Services

In addition to conventional communication services, MD785 features rich digital services and optional functions such as Message, GPS Dispatching\*, High-speed Data Transmission\*.

### Further Development Port

The reserved port in MD785 allows users or any third party to further develop other helpful functions.

## Industrial Design Features >>



Large and easy to use knob (channel switch knob and volume knob in one)



Innovative Ring-shaped LED to show clear status



Rugged palm microphone port

2.0" High-definition Color TFT LCD



Visual Pleasure with Dual-color Injection Molding



Effective Heat-sink Capability



Six Programmable Keys

