SPECIFICATIONS

GENERAL			
Frequency Range		UHF1: 400-470MHz; UHF3: 350-400MHz; VHF: 136-174MHz	
Channel Capacity		1024	
Zone Capacity		64(each with a maximum of 256 channels)	
Channel Spacing		Analogue: 25/20/12.5kHz Digital: 12.5kHz	
Operating Voltage		13.6 V ±15%	
Current Drain	Standby	< 0.6A	
	Receive	< 2.0A	
	Transmit	1W	<2A
		25W	<8A
		45W	<12A
		50W	<12A
Weight		1.7 kg	
Dimensions (H×W×D)		60 x 174 x 200 mm	
Frequency Stability		±0.5 ppm	
Antenna Impedance		50Ω	
LCD Display		2.0 inch, 4 rows	
RECEIVER			
Sensitivity	Analogue	0.22μV (12dB SINAD) 0.18μV (12dB SINAD) (Typical) 0.35μV(20dB SINAD)	
	Digital	0.22μV/BER5%	
Selectivity	TIA-603	65dB @ 12.5kHz / 75dB @ 20/25kHz	
	ETSI	60dB @ 12.5kHz / 70dB @ 20/25kHz	
Intermodulation	TIA-603	75dB @ 12.5/20/25kHz	
	ETSI	70dB @ 12.5/20/25kHz	
Spurious Response Rejection	TIA-603	75dB @ 12.5/20/25kHz	
	ETSI	70dB @ 12.5/20/25kHz	
Hum and Noise		40dB @ 12.5kHz; 43dB @ 20kHz 45dB @ 25kHz	
Rated Audio Power Output		Internal (@20 ohm load)	3W
		External (@8 ohm load)	7.5W
Max Audio Power Output		Internal (@20 ohm load)	8W
		External (@8 ohm load)	20W
Rated Audio Distortion		≤3%	
Audio Response		+1 ~ -3dB	
Conducted Spurious Emission		<-57dBm	

TRANSMITTER	
RF Power Output	Low power : 1-25W High power : UHF: 1-45W; VHF: 5-50W
FM Modulation	11K0F3E @ 12.5kHz; 14K0F3E @ 20kHz; 16K0F3E @ 25kHz
4FSK Digital Modulation	12.5KHz Data Only: 7K60FXD 12.5KHz Data & Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm<1GHz; -30dBm>1GHz
Modulation Limiting	±2.5kHz @ 12.5kHz; ±4.0kHz @ 20kHz; ±5.0kHz @ 25kHz
FM Hum & Noise	40dB @ 12.5kHz; 43dB @ 12.5kHz 45dB @ 25kHz
Adjacent Channel Power	60dB @ 12.5kHz; 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	
Operating Temperature	-30℃~ +60℃
Storage Temperature	-40℃~ +85℃
ESD	IEC 61000-4-2 (Level 4) ±8kV (Contact) ±15kV (Air)
Military Standard	MIL-STD-810 C/D/E/F/G
Dustproof & Waterproof	IP54 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	
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	<5 meters

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

Hytera
Respond & Achieve

Hytera Communications Corporation Limited
Stock Code: 002583.SZ
Address: Hytera Communications (UK) Co. Ltd.
Hytera House, 939 Yeovil Road, Slough, Berkshire. SL1 4NH, UK.
Tel: +44 (0) 1753 826 120 **Fax:** +44 (0) 1753 826 121
www.hytera.co.uk **info@hytera.co.uk**

Hytera reserves the right to modify the product design and the specifications. In case of a printing error, Hytera does not accept any liability. All specifications are subject to change without notice.

HYT, Hytera are registered trademarks of Hytera Communications Corp., Ltd.
© 2018 Hytera Communications Corp., Ltd. All Rights Reserved.

EN20180326A

Hytera

MD785i Series

The Powerful Digital Mobile Two-way Radio

- Excellent voice transmission
- Large Colourful Display with High Visibility
- Remote Control Head
- Full Duplex Call/ Single Frequency Repeater

www.hytera.co.uk

MD785i Series

As a product built to the DMR standard, MD785i Series is endowed with ergonomic design, all-round digital functionality and remarkable quality. These features improve managements efficiency and its ability to respond to emerging situations efficiently. The MD785i Series is the ideal solution for in-vehicle or desktop communication requirements.

PROFESSIONAL AND SIMPLE TO USE

User Friendly
The large colourful display offers a clear screen even under strong sunlight. The large keyboard and seven ergonomic programmable keys facilitate efficient and productive communications in various conditions.

Reliable & Durable
MD785i Series complies to both MIL-STD-810 C/D/E/F/G and IP54 standards, ensuring outstanding performance even under harsh environments.

DMO True 2-Slot
In DMO mode, MD785i Series provide 2-slot communication, which allows for 2 talk paths on one frequency simultaneously.

Remote Control Head
The remote control kit offers you great flexibility. You can install the control console and the main units at separate locations based on actual requirements.

Full Duplex Call (Optional)
Hytera MD785i can provide full duplex calls with PD985, MD785i, telephones or cell phones in DMO or RMO mode.

Telemetry
Telemetry is helpful for operator real-time remote monitoring. It can be used to check a devices running status and also control the devices.

GPS
With the optional built-in GPS module, MD785i can upload its location to AVL applications in real time.

Enlarge Communication Range
With 50W transmit power output and higher RX sensitivity, the MD785i Series increases the communications range there by reducing your network investment.

Smooth Migration
The MD785i Series can operate in analogue and digital modes, ensuring a smooth and seamless migration between the two technologies. Simple, Smooth, and Cost-effective.

Single Frequency Repeater Mode (Optional)
When SFR is enabled, MD785i uses one slot to receive voice and data, then transmits them on an alternate slot. This extends the communication range in DMO mode.

Analogue Signaling
MD785i Series support DTMF, 5 tone, HDC1200 and 2 tone signalling.

Secure Communication
MD785i Series supports both basic and advanced encryption technology. This provides a high level of security protection for your voice and data communications.

Roaming
MD785i Series support automatic roaming at all sites in an IP Multi-site Connect system.

Text Message
This feature is useful for communicating sensitive information or when in noisy environments where it is hard to hear the voice clearly.

Back To Back Solution
The back to back solution achieves cross-band communication between analogue and digital modes. With a back to back data cable, two MD785i mobile radios can be connected to realize intercommunication between different systems.

VERTICAL MARKETS

Public Safety

Public Security

School Bus

Forest Industry

Business

Manufacturing

ACCESSORIES Diverse accessories for specific tasks

STANDARD

Palm Microphone (For Half Duplex Model)

Telephone Style Handset (For Full Duplex Model)

Mounting Bracket

Power Cord

OPTIONAL

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