

SPECIFICATIONS

GENERAL			
Frequency Range		UHF1: 400-470MHz; UHF2:450-520MHz UHF3: 350-400MHz; VHF: 136-174MHz	
Channel Capacity		1024	
Zone Capacity		64(each with a maximum of 256 channels)	
Channel Spacing		Analog: 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	Analog	0.22μV (12dB SINAD) 0.18μV (12dB SINAD) (Typical)	
	Digital	0.35μV (12dB SINAD) 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	TIA-603	75dB @ 12.5/20/25kHz	
	ETSI	70dB @ 12.5/20/25kHz	
Rejection		40dB @ 12.5kHz; 43dB @ 20kHz 45dB @ 25kHz	
Hum and Noise			
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: 1-50W
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+2™ 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)
American Military Standard	MIL-STD-810 C/D/E/F/G
Dustproof & Waterproof	IP54
Humidity	
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G
GPS	
Accuracy specs are for long-term tracking (5 satellites visible at nominal -130dBm)	
TTFF (Time To First Fix) Cold Start	<1 minute
TTFF (Time To First Fix) Hot Start	<10 seconds
Horizontal Accuracy	<5m (50% probable) ;<10m (95% probable)

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



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MD78Xi Series

The Powerful Digital Mobile Two-way Radio

- Excellent voice transmission
- Large Colorful Display with High Visibility
- Remote Control Head

Full Duplex Call/ Single Frequency Repeater








MD78Xi Series


As a product built to the DMR standard, MD78Xi Series is endowed with ergonomic design, all-round digital functions and remarkable quality. These features improve your management efficiency and enable you to be responsive to emergent efficiency. The MD78Xi Series is the ideal solution


PROFESSIONAL AND SIMPLE TO USE


- 


User Friendly
The large colorful display offers a clear display even under strong sunlight. The large keyboard and seven ergonomic
- 


Smooth Migration
The MD78Xi Series can operate in analogue and digital modes, ensuring a smooth and seamless migration between
- 


Reliable & Durable
MD78Xi Series is strictly compliant with MIL-STD-810 C/D/E/F/G and IP54 standards, ensuring outstanding
- 


Single Frequency Repeater Mode (Optional)*
When SFR is enabled, MD78Xi use one slot to receive voice and data, and forwards them on the other, extending the
- 


Remote Control Head
The remote control kit offers you great flexibility. You can install the control console and the main units at separate
- 


Analog Signaling
MD78Xi Series support DTMF, 5 tone, HDC1200 and 2 tone
- 


Secure Communication
MD78Xi Series support basic and advanced encryption technology, which provides a high security protection for
- 


Full Duplex Call (Optional)*
Hytera MD78Xi can make full duplex calls with PD98X,
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Roaming
MD78Xi Series support automatic roaming among all sites
- 

Text Message
This feature is useful for communication of sensitive information and in noisy environment where it is hard to hear the voice clearly.
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Telemetry
Telemetry is helpful for real-time remote monitor. It is used to check the device running status and control devices if
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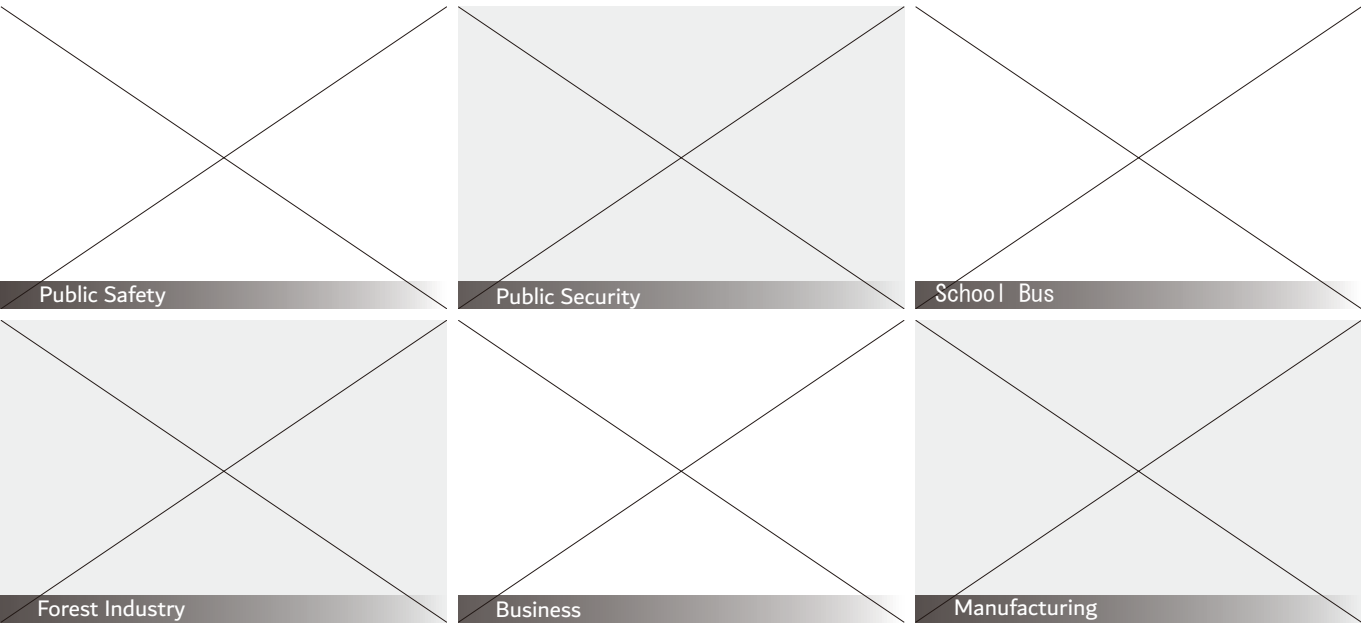
Positioning
With the positioning chipset, MD78Xi uploads its location
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Back To Back Solution
The back to back solution achieves cross-band communication between analog and digital modes. With a
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Enlarge Communication Range
With 50W transmit power output and higher RX sensitivity, MD78Xi Series enlarge the communication range to reduce

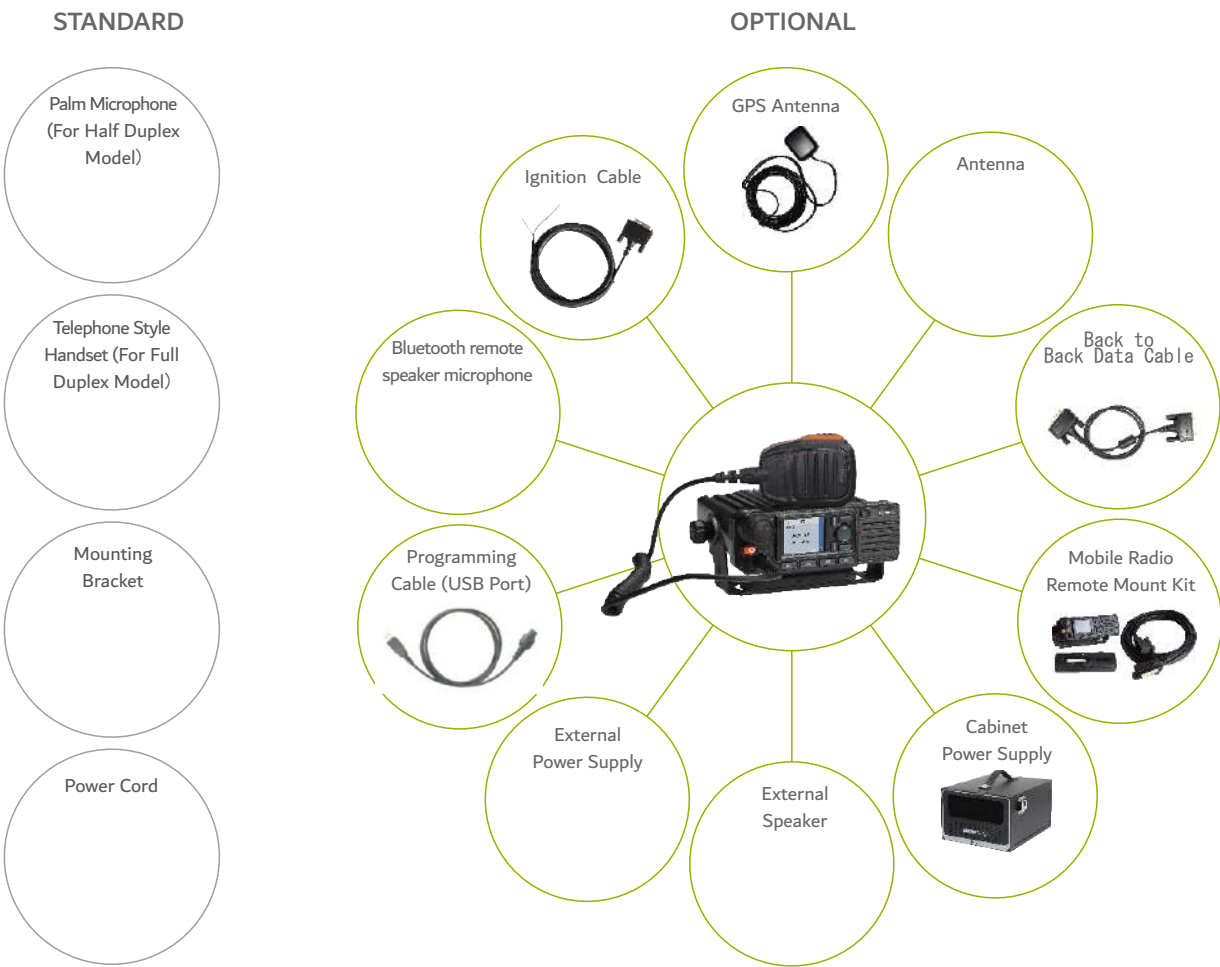
* Currently, only UHF1(400-470MHz) model supports SFR and full duplex call feature.

VERTICAL MARKETS



ACCESSORIES

Diverse accessories for specific tasks



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