

Digital Migration Radio MD65X



Features

Lightweight, Sleek and Stylish

Only 165x46x140mm in size and weighs a mere 1.05kg (including smart microphone).

Remote Control

All operations are done via the microphone and are easy to use and control.

Selectable RF Power Output

Continuously adjustable from 1W to 25W.

Superior Voice Quality

Uses narrowband codec and digital error-correction technologies for superior voice clarity in noisy environments or at the edge of the coverage area. Also includes AGC technology for optimising voice input and output.

3 Mode(Analog, Digital, XPT Trunking)

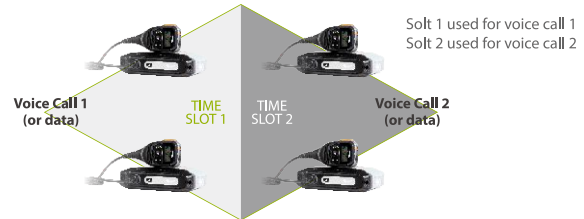
Compatible with analog conventional, digital conventional and XPT digital trunking operation mode.

Versatile Services

In addition to conventional communication services, MD65X features rich data services and selectable functions such as: Text Message, Telemetry, Emergency, OTAP and GPS.

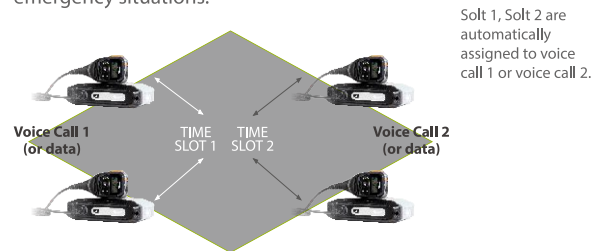
DMRA Direct Mode TDMA (True 2-slot)

In DMO mode supports two voice calls simultaneously with only one frequency.



Dual-slot Pseudo Trunk

With this feature, a free time slot can be allocated to a member who needs to communicate urgently, effectively enhancing frequency efficiency and allowing timely communication in emergency situations.



Reliable Quality

MD65X is compliant with the stringent MIL-STD-810 C/D/E/F/G and IP54 standards, ensuring outstanding performance even in harsh environments.

GPS Positioning (Factory Option)

The built-in GPS module supports GIS applications.

Highlights

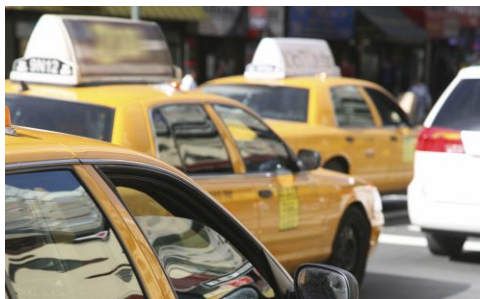
- The lightest DMR mobile radio

- RF output power adjustable from 1W to 25W
- DMRA Direct Mode TDMA (True 2-slot)
- Easy operation microphone with display



Target Markets

The compact MD65X is specifically designed with safety and ease-of-operation in mind, providing safe and reliable communications for numerous applications across industry.



Taxi



Transportation



Public security

Accessories

Versatile accessories for specific tasks



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

FRONT



BACK



TOP



Specifications

General			
Frequency Range	UHF1: 400-470MHz; UHF2: 450-527MHz; VHF: 136-174MHz		
Channel Capacity	1024		
Zone Capacity	64 (each with a maximum of 16 channels)		
Channel spacing	12.5KHz / 20KHz / 25KHz ^a		
Operating Voltage	13.6 V ±15%		
Current Drain	Standby	< 0.6A	
	Receive	< 2.0A	
	Transmit	1W	<3A
		25W	<8A
Weight	1050g		
Dimensions	165 X 46 X 140mm		
Frequency Stability	±0.5 ppm		
Antenna Impedance	50Ω		
Receiver			
Sensitivity	Analog	0.3μV (12dB SINAD); 0.22μV (Typical) (12dB SINAD); 0.4μV (20dB SINAD)	
	Digital	0.3μV /BER5%	
Selectivity	TIA-603	65dB @ 12.5KHz / 75dB @ 20/25KHz ^a	
	ETSI	60dB @ 12.5KHz / 70dB @ 20/25KHz ^a	
Intermodulation	TIA-603	75dB @ 12.5/20/25KHz ^a	
	ETSI	70dB @ 12.5/20/25KHz ^a	
Spurious Response Rejection	TIA-603	75dB @ 12.5/20/25KHz ^a	
	ETSI	70dB @ 12.5/20/25KHz	
Blocking	TIA-603	90dB	
	ETSI	84dB	
Hum and Noise	40dB @ 12.5KHz 43dB @ 20KHz ^a 45dB @ 25KHz ^a		
Rated Audio Power Output	Microphone (@20 ohm load)	1.5W	
	External (@8 ohm load)	7.5W	
Max Audio Power Output	Microphone (@20 ohm load)	3W	
	External (@8 ohm load)	20W	
Rated Audio Distortion	≤3%		
Audio Response	+1 ~ -3dB		
Conducted Spurious Emission	<-57dBm		

Transmitter	
RF Power Output	1-25W
FM Modulation	11K0F3E @ 12.5KHz; 14K0F3E @ 20KHz 16K0F3E @ 25KHz ^a
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 ^a ±5.0KHz @ 25KHz ^a
FM Hum & Noise	40dB @ 12.5KHz 43dB @ 20KHz ^a 45dB @ 25KHz ^a
Adjacent Channel Power	60dB @ 12.5KHz; 70dB @ 20/25KHz ^a
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°C~ +60°C
Storage Temperature	-40°C~ +85°C
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 Standard
Humidity	MIL-STD-810 C/D/E/F/G Standard
Shock & Vibration	MIL-STD-810 C/D/E/F/G Standard

GPS (for MD65X GPS only)	
Accuracy specs are for long-term tracking(95th percentile values>5 satellites visible at a nominal -130dBm signal strength)	
TTF (Time To First Fix) Cold Start	<1 minute
TTF (Time To First Fix) Hot Start	<10 seconds
Horizontal Accuracy	<10 meters

^a20KHz/25KHz will not be available on new equipment in the U.S. after 2011-01-01.

All specifications are subject to change without notice due to continuous development.

MD65X, X=0, 2, 5, 6 or 8, model number varies geographically. For details, please contact our regional sales representatives.



Hytera Communications Corporation Limited

Address: Hytera Tower, Hi-Tech Industrial Park North, Beihuan Rd., Nanshan District, Shenzhen, China

Tel: +86-755-2697 2999 **Fax:** +86-755-8613 7139 **Post:** 518057

Http: //www.hytera.com **Stock Code:** 002583.SZ



Hytera retains right to change the product design and specification. Should any printing mistake occur, Hytera doesn't bear relevant responsibility. Little difference between real product and product indicated by printing materials will occur by printing reason.

HYT, Hytera are registered trademarks of Hytera Communications Co., Ltd.

© 2014 Hytera Communications Co., Ltd. All Rights Reserved.