



# Digital Migration Radio MD612

- > Analog & Digital Dual Modes
- > Clear Voice
- > Remote Control Head
- > GPS and Bluetooth Option





## PROFESSIONAL AND SIMPLE TO USE



### A&D Auto Detect

Compatible with analog conventional and digital conventional modes. Allow MD61X to simultaneously monitor analog and digital modes and automatically respond in each mode. It is an easy way for migration to digital from analog.



### ENLARGE TALKING RANGE

With a high RF power output up to 50W, MD61X can dramatically enlarge your communication range.



### GPS POSITIONING (Optional)

With an external GPS module and GPS antenna, MD61X can upload its real-time position to AVL applications.



### REMOTE CONTROL HEAD(Coming soon)

Remote control head kit reduces your concerns of installation, and offers you a flexible solution for various vehicle types.



### ANALOG SIGNALING

Support DTMF and HDC1200(coming soon) signaling in analog mode.



### DOUBLE CAPACITY IN DIRECT MODE

Based on the DMR TDMA technology, you can have two voice calls simultaneously in direct mode.



### RELIABLE AND DURABLE

MD61X is compliant with MIL-STD-810 C/D/E/F/G and IP54.



### PSEUDO TRUNK

Several talk groups share the same frequency, and each one of them can dynamically chose to use one of the slots to talk. This is a two-slot-trunked mode. While time-slot 1 is busy, MD61X will use time-slot 2 to transmit.



### RADIO REGISTRATION SERVICE

RRS allows MD61X working in Smart Dispatch and SmartOne Dispatch, for online/offline presence.



### SUPPLEMENTARY FEATURES (Optional)

MD61X supports radio Enable/Disable, Remoter Monitor and Priority Interrupt.



### EMERGENCY ALARM/CALL

Use the orange emergency button to initiate an emergency alarm and call to other radios.



### BUILT-IN BLUETOOTH (Factory Optional)

Built-in Bluetooth supports MD61X to have wireless audio accessories and external PTT device connected.



### PRIVACY

Basic end-to-end Encryption secures your voice and data transmission.



### ROAMING (Optional)

It allows MD61X to be used in a large multi-site network.

# TARGET MARKETS



Taxi



Agriculture



Truck



Delivery



School Bus



Ambulance

# ACCESSORIES

Diverse accessories for specific tasks

STANDARD



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

# SPECIFICATIONS

GENERAL				
Frequency Range	UHF: 400-470MHz; VHF: 136-174MHz			
Channel Capacity	48 (16 channels per zone)			
Zone Capacity	3			
Channel spacing	12.5 / 25 KHz			
Operating Voltage	13.6 V ±15%			
Current Drain	Standby	around 0.3A		
	Receive	< 1 A		
	Transmit	1W	<3A	
		25W	<8A	
		5W	<5A	
45W		<12A		
Weight	1100g			
Dimensions	164 X 43 X 150 mm			
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	60dB @ 12.5KHz / 70dB @ 25KHz <sup>†</sup>		
	ETSI	60dB @ 12.5KHz / 70dB @ 25KHz <sup>†</sup>		
Intermodulation	TIA-603	70dB @ 12.5/25KHz <sup>†</sup>		
	ETSI	65dB @ 12.5/25KHz <sup>†</sup>		
Spurious Response Rejection	TIA-603	70dB @ 12.5/25KHz <sup>†</sup>		
	ETSI	70dB @ 12.5/25KHz		
Blocking	TIA-603	90dB		
	ETSI	84dB		
Hum and Noise	40dB @ 12.5KHz 45dB @ 25KHz <sup>†</sup>			
Rated Audio Power Output	Internal (@16 ohm load)	4W		
	External (@8 ohm load)	8W		
Max Audio Power Output	Internal (@16 ohm load)	6W		
	External (@8 ohm load)	12W		
Rated Audio Distortion	≤3%			
Audio Response	+1 ~ -3dB			
Conducted Spurious Emission	<-57dBm			

TRANSMITTER	
RF Power Output	Low power version: 1-25W (UHF/VHF) High power version: 5-45W(UHF) / 5-50W(VHF)
FM Modulation	11K0F3E @ 12.5KHz; 16K0F3E @ 25KHz <sup>†</sup>
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 ±5.0KHz @ 25KHz <sup>†</sup>
FM Hum & Noise	40dB @ 12.5KHz 45dB @ 25KHz <sup>†</sup>
Adjacent Channel Power	60dB @ 12.5KHz; 70dB @ 25KHz <sup>†</sup>
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 G
Dustproof & Waterproof	IP54 Standard
Humidity	MIL-STD-810 G Standard
Shock & Vibration	MIL-STD-810 G Standard

<sup>†</sup>20KHz/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.

MD61X, X=0, 2, 5, 6 or 8, model number varies geographically. For details, please contact our regional sales representatives.



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