



MD6100

Digital Mobile Radio

- Full features compliant with European ETSI DMR Tier II & III
- Support conventional and trunking modes; support analog and digital modes
- UHF & VHF
- Different power output (5 - 25 W, 5 - 45 W), enhanced communication coverage
- Standard embedded Micro SD card for voice recording and encryption
- GPS, Bluetooth
- Numeric and non-numeric hand microphone available
- Integral radio / Split radio designs
- Friendly open API for third party development
- Full range of accessories for easy installation and utilization



CE FC RoHS MIL-STD SRRC



General Specifications

Communication Protocols & Standards		DMR tier 3 digital trunking ETSI-TS102 361-1, -2, -3, -4 Analog trunking MPT 1327 / MPT1343
Frequency Bands		MD6115 : VHF 136-174MHz ; MD6140 : UHF 400-470MHz
Channel Capacity		1024
Zone Capacity		64
Channel Spacing		12.5KHz / 20KHz/25KHz
Operating Voltage		13.6V±15%
Current Consumption	Standby Current	<0.6A
	Receiving Current	<0.2A
	Transmitting Current	<5A(5W); <8A(25W); <12A(45W / 50W)
Antenna Impedance		50Ω
Dimensions		60*168*175mm(H*W*D)
Weight		1.8kg
Frequency Stability		±0.5ppm
LCD Display		2.2 inches transfective/ transmissive TET LCD display, resolution: 320*240
Transmitter		
Power Output		VHF High power: 50W; VHF Low power: 5W UHF High power: 45W; UHF Low power: 5W
FM Modulation		11KOF3E@12.5KHz; 14KOF3E@20KHz; 16KOF3E@25KHz
4FSK Digital Modulation Method		12.5kHz Data: 7F60FXD; 12.5kHz Data & voice: 7F60FXW
Spurious Emission		-36dBm < 1GHz; -30dBm > 1GHz
Modulation Limiting		±2.5KHz@12.5KHz; ±4.0KHz@20KHz; ±5.0KHz@25KHz
FM Noise		40dB@12.5KHz; 43dB@20KHz; 45dB@25KHz
Adjacent Channel Power		60dB@12.5KHz; 70dB@20/25KHz
Audio Response		+1~-3dB
Audio Distortion		≤3%
Receiver		
Sensitivity	Analog	0.3μV (12dB SINAD); 0.22μV (Typical value) (12dB SINAD); 0.4μV(20dB SINAD)
	Digital	0.3μV/ BER5%
Adjacent Channel 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
Blocking	TIA-603	90dB
	ETSI	84dB
Hum and Noise		40dB@12.5KHz 43dB@20KHz 45dB@25KHz;
Receiving Rated Audio Power	Built-in(load 20Ω)	3W
	External(load 8Ω)	7.5W
Rated Audio Distortion		≤3%
Audio Response		+1~-3dB
Conducted Spurious Emission		< -57dBm
Environment Index		
Operation temperature / Storage temperature		-30°C~+60°C / -40°C~+85°C
ESD	IEC 61000-4-2(level 4)	
	±8KV(contact); ±15KV(air)	
Environment Test Standard		MIL-STD-810 C / D / E / F / G
Water & dust proof	Integral type	IP54
	Split type	Control head IP67, main unit IP54
Humidity		According to MIL-STD-810 C / D / E / F / G standard
Shock& vibration		According to MIL-STD-810 C / D / E / F / G standard
GPS <small>The accuracy standard is applicable for long time tracking. (95% value > under rated -130dBm signal strength, there are 5 visible satellites)</small>		
TTF cold start		< 1 min
TTF hot start		< 10 sec
Horizontal location accuracy		< 10 m

Remark: The above specifications comply with standard tests accordingly and due to continuous technical development, they are subject to changes without prior notice.

Accessories:



Power supply cable



Non-numeric hand microphone



Bracket



GPS antenna (optional)



Power supply (optional)



Programming cable (optional)



Programming connecting line (optional)



Numeric hand microphone (optional)



Bluetooth (optional)

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