

TM840 DMR MOBILE RADIO

TM840 SPECIFICATIONS

General		
Frequency Range		136~174MHz 350~400MHz 400~470MHz 450~520MHz
Channel Capacity		1024
Zone Capacity		248
Channel Spacing		12.5kHz/20kHz/25kHz
Normal Operating Voltage		13.6±15%
Current Drain	Standby(Max)	<0.6A
	Receive(Max)	<2.0A
	Transmit(Max)	<14A(40W) <8A(25W)
Dimension		176mm×59mm×183mm
Weight		1.5Kg
Transmitter		
Frequency Stability		0.5ppm
Power Output		Low Power:25W High Power: 40W(UHF)/45W(VHF)
Modulation Limiting		2.5kHz@12.5KHz,4kHz@20kHz,5kHz@25kHz
FM Hum and Noise		-40dB@12.5kHz,-45dB@20kHz/25kHz
Conducted/Radiated Emission		-36dBm@<1GHz, -30dBm@>1GHz
Adjacent Channel Power		-60dB@12.5kHz,-70dB@20kHz/25kHz
4FSK Digital Modulation		12.5kHz Data: 7K60F1D&7K60FXD,12.5kHz Voice: 7K60F1E&7K60FXE Combination of 12.5kHz Voice and Data: 7K60F1W
FM Modulation Mode		12.5kHz:11K0F3E, 25kHz:16K0F3E
Audio Response		+1~-3dB
Audio Distortion		3%
Vocoder		AMBE+ +
Digital Protocol		ETSI TS 102 361-1, -2, -3
Receiver		
Frequency Stability		0.5ppm
Digital Sensitivity		5%BER:0.22μV
Analog Sensitivity		0.25 μV(12dB SINAD)
Intermodulation		TIA603C:70dB ETSI:65dB
Adjacent Channel Selectivity		ETSI: 60dB@12.5kHz, 70dB@20kHz/25kHz
Spurious Response Rejection		TIA603C:75dB ETSI:70dB
Rated Audio Power		3W
Rated Audio Distortion		3% (Typical)
Hum and Noise		-40dB@12.5kHz, -45dB@20kHz/25kHz
Audio Response		+1~-3dB
Conducted Spurious Emission		-57dBm@ < 1GHz, -47dBm @> 1GHz

Kirisun reserves the right to change any specifications without warning due to the technology improvement.

For more information,please visit www.kirisun.com or contact marketing.os@szkirisun.com



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A DMR product with ergonomic design and all-round digital functions, TM840 helps to improve management efficiency and responsiveness in emergency situations.

The Kirisun DMR series is a cost effective migration solution from analog to digital which you can do at your own pace.



Kirisun DMR Solution
Delivers Significant Benefits

TM840 DMR MOBILE RADIO

KEY FEATURES AND BENEFITS

• 1.8” Graphic Dot-matrix True Color Display

The large-sized, full color display enables easy viewing of information even under bright sunlight.

• Multiple Languages

TM840 supports multiple languages including English, simplified Chinese, German, French, Turkish and Spanish.

• One Touch Operation in Usage

TM840 provides four programming keys, providing one touch operation such as Text Message or Voice Calls.

• Versatile Voice Calls & Data Services

The Intelligent TM840 supports various voice call types, including Private Call, Group Call, All Call and Emergency Call, as well as data services, e.g. Text Message and Data Transfer.

• Voice Privacy

Enhanced digital encryption and scrambled analog call feature facilitate the management of the calls between team members and ensure the privacy of communications in any chosen mode.

• GPS

Integrated LIP (Location Information Protocol) enables the real time tracking of the mobile radio.

• Various Analog Signaling Types

TM840 supports various analog signaling types (MDC1200, DTMF, 2-Tone and 5-Tone), various squelch control types (CTCSS/CDCSS), thus providing compatibility with existing analog communication systems.

• Supplementary Services

TM840 supports supplementary services such as Radio Check, Remote Monitor, Call Alert, Monitor Channel, Permanent Monitoring, Kill, Stun and Revive, Transmit Interrupt.

• Accessory Expansion

TM840 is designed with second accessories ports via the rear port of the mobile, e.g. emergency footswitch or Telephone Interconnect (via DTMF signaling). It is also possible to support simplex voice communications between a radio and a telephone user. It allows a radio user to make a telephone call or a telephone user to make either a Group or Private Call to radio users through a Private Automated Branch Exchange (PABX) or a Public Switched Telephone Network (PSTN).

• Scan

TM840 supports scanning of analog voice and signaling, digital voice and data, and also mixed mode scan including analog and digital signals.

• Optional Board

TM840 reserves standard interface for any third party to further develop desired functions (such as Record, Bluetooth, RFID, and encryption Algorithm) with the optional board.

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GPS

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

ENVIRONMENTAL SPECIFICATION

Operating Temperature	—30℃ ～ +60℃
Storage Temperature	—40℃ ～ +85℃
Temperature Shock	Per MIL-STD
ESD	IEC 61000-4-2(level 4)
Humidity	Per MIL-STD
Water and Dust proof	IP54

MILITARY STANDARDS 810

810C			810D		810E		810F		810G	
APPLICABLEMIL-STD	METHODS	PROC/CAT	METHODS	PROC/CAT	METHODS	PROC/CAT	METHODS	PROC/CAT	METHODS	PROC/CAT
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.4	II
High Temperature	501.1	I,II	501.2	I/ A1,II/ A1	501.3	I/ A1,II/ A1	501.4	I/Hot ,II/Hot	501.5	I/Hot A1,II/Hot (A1)
Low Temperature	502.1	I	502.2	I/C3,II/C1	502.3	I/C3,II/C1	502.4	I/C3,II/C1	502.5	I/C3,II/C1
Temperature Shock	503.1	—	503.2	I/A1C3	503.3	I/C1A3	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I
Rain	506.1	I,II	506.2	I,II	506.3	I,II	506.4	I,III	506.5	I,III
Humidity	507.1	II	507.2	II	507.3	II	507.4	—	507.5	II
Salt fog	509.1	—	509.2	—	509.3	—	509.4	—	509.5	—
Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Vibration	514.2	VIII/F,CURVE-W	514.3	I/10,II/3	514.4	I/10,II/3	514.5	I/24	514.6	I/24
Shock	516.2	I,II	516.3	I,IV	516.4	I,IV	516.5	I,IV	516.6	I,IV

STANDARD ACCESSORIES



Remote Speaker



Fixed Bracket



DC Power Cable

