



TM840

DMR MOBILE RADIO

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**

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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 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, including ARC4, DES and 256 bits AES encryption algorithm 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(Optional)**

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

- **Multiple Analog Signaling Modes**

Multiple analog signaling, including MDC1200, DTMF, 2-Tone and 5-Tone, provides 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 an accessory port. It allows an external connection of a variety of accessories, like PTT foot pedal.

- **Scan**

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

- **Integrated Bluetooth(Optional)**

Built-in Bluetooth for connecting with variety of accessories like PTT button, Earphones and more.

- **Single Frequency Repeater (Optional)**

Support single-frequency repeater under digital mode, greatly saving frequency resources and extending communication range.

- **DMR Tier3 and MPT Working Mode(Optional)**

It supports DMR Tier3 and MPT1327 working mode .This option need license.



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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	10 m

ENVIRONMENTAL SPECIFICATION

Operating Temperature	-30°C ~ +60°C
Storage Temperature	-40°C ~ +85°C
ESD	IEC61000-4-2(Level4)
	±4kV(Contact) ±8kV(air)
American Military Standard	MIL-STD-810-C/D/E/F/G
Dust & Water Protection	IP54 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard

MILITARY STANDARDS 810

		810C		810D		810E		810F		810G	
APPLICABLE MIL-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



Palm Microphone



Mounting Bracket



Power Cord



Professional Wireless Communication System Solution Supplier

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TM840 SPECIFICATIONS

General		
Frequency Range	136~174MHz, 350~400MHz 400~470MHz, 450~520MHz	
Channel Capacity	1024	
Zone Capacity	248	
Channel Spacing	20kHz/25kHz/12.5kHz	
Operating Voltage	13.6±15%	
Current Drain	Standby	<0.6A
	Receive	<2.0A
	Transmit	<8A(25W) <14A(40W/45W)
Frequency Stability	0.5ppm	
Antenna Impedance	50Ω	
Dimensions(H·W·D)	176mm×59mm×183mm	
Weight	1.5Kg	
LCD Display	1.77inch, 5 rows	
Receiver		
Sensitivity	Analog	0.22 μV(12dB SINAD)
	Digital	0.22μV/BER5%
Selectivity	60dB@12.5kHz, 70dB@20/25kHz(TIA-603); 60dB@12.5kHz, 70dB@20/25kHz(ETSI)	
Spurious Response Rejection	70dB@12.5/20/25kHz(TIA-603), 70dB@12.5/20/25kHz(ETSI)	
Hum and Noise	40dB@12.5KHz, 45dB@20/25KHz	
Rated Audio Power Output	3W	
Rated Audio Distortion	3% (Typical)	
Audio Response	+1~-3dB	
Conducted Spurious Emission	-57dBm@ < 1GHz, -47dBm @> 1GHz	
Transmitter		
RF Power Output	Low Power:25W, High Power: 40W(UHF)/45W(VHF)	
FM Modulation	11K0F3E@12.5kHz, 14K0F3E@20kHz, 16K0F3E@25kHz	
4FSK Digital Modulation	12.5kHz Data: 7K60F1D&7K60FXD, 12.5kHz Voice: 7K60F1E&7K60FXE Combination of 12.5kHz Voice and Data: 7K60F1W	
Modulation Limiting	±2.5kHz@12.5kHz, ±4.0kHz@20kHz, ±5.0kHz@25kHz	
FM Hum & Noise	40dB@12.5kHz, 45dB@20kHz/25kHz	
Adjacent Channel Power	60dB@12.5kHz, 70dB@20kHz/25kHz	
Audio Response	+1~-3dB	
Audio Distortion	≤3%	
Digital Vocoder Type	ABME+2™	
Digital Protocol	ETSI-TS 102 361-1,-2,-3,-4	

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

For more information, please visit www.kirisun.com or
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FC CE ISO9001: 2015 Accredited Designer & Manufacturer