



# TR850

## DMR REPEATER

A DMR product with ergonomic design and all round digital functions, TR850 helps to improve management efficiency and responsiveness in emergency situations.

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



**Kirisun DMR Solution  
Delivers Significant Benefits**

# TR850 DMR REPEATER

## KEY FEATURES AND BENEFITS

### • Professional 3U Design

Professional 3U design leaves enough space for an added duplexer and is suitable for desk-top, cabinet and rack installations.

### • Outstanding Heat Dissipation

The unique cooling design combines a built-in heat pipe and an intelligent control fan, ensuring very efficient heat dissipation, preventing the repeater from over-heating in high output power mode.

### • Smart Digital-Analog Auto Detection

TR850 can be configured to analog, digital or mixed mode. When configured to mixed mode, the repeater can dynamically switch between analog and digital depending on the type of call it receives.

### • Accessory Expansion

TR850 supports third party development via a rear port on the repeater. This is achieved via the signal streaming and pin control through the repeater ports.

### • IP Connecting

IP connecting is a function, which enables repeaters in different areas to switch data, voice and packets over a TCP/IP based network.

### • LED Indicator

There are 9 LED indicators on the front of panel to enable you to identify the repeater status clearly.



1 LED Indicator

## TR850 SPECIFICATIONS

### General

Frequency Range	136~174MHz, 400~470MHz
Channel Capacity	16
Transmitting Current Drain	<10A(25W)/15A(45W)
Channel Spacing	12.5kHz/20kHz/25kHz
Operating Temperature	-30℃ ~ +60℃
Operating Voltage	DC13.8±20% Option:AC 100—250V 50/60Hz
Storage Temperature	-40℃ ~ +85℃
ESD	IEC 61000-4-2
Max Duty Cycle	100%
Dimensions	482.5mmx338.5mmx132.5mm
Weight	11.5Kg

### Transmitter

Frequency Stability	1.5ppm
Power Output	25/40W(UHF) 25/45W(VHF)
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
FM Modulation Mode	12.5kHz:11KΦF3E, 20kHz: 14ΦFK3E, 25kHz:16KΦF3E
Modulation Limiting	2.5kHz@12.5kHz, 4kHz@20kHz, 5kHz@25kHz
Audio Response	+1dB~-3dB
Audio Distortion	≤3%

### Receiver

Frequency Stability	1.5ppm
Analog Sensitivity	0.30μV (12dB SINAD)
Digital Sensitivity	5%BER:0.3μV
Intermodulation	TIA603C:75dB ETSI:70dB
Adjacent Channel Selectivity	TIA-603:65dB@12.5 kHz/75dB@20/25 kHz ETSI: 65dB@12.5 kHz/75dB@20/25 kHz
Spurious Response Rejection	TIA603C:75dB ETSI:70dB
Conducted Spurious Emission	-57dBm@<1GHz, -47dBm@>1GHz
Rated Audio Distortion	≤3% (Typical)
Hum and Noise	-40dB@12.5kHz, -45dB@20kHz/25kHz



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|----------------|--|
| 1 AC Power     | 5 RX Connector                         |
| 2 TX Connector | 6 IP In-put                            |
| 3 GPS          | 7 26 Pin the 2nd Development Connector |
| 4 Fan          | 8 DC Power Connector                   |



**Kirisun Communications Co.,Ltd.**

FC CE ISO9001:2008 Accredited Designer & Manufacturer

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