

VHF / UHF Digital / Analogue Repeater



TR-6000DM-V / TR-6000DM-U

The professional regular two-way radio communication system is the only one system which does not digitalized. TR-6000DM from New Century Company (Kydera) can well realize digital performance.

TR-6000DM digital repeater is adopting advanced circuit technology and modular structure technology, providing a high-performance, reliable and stable wireless transmit& receive function on a full frequency band.

Device features

- ◆ Adopting 3.5-inch TFT color display, showing bright and clear of the operation status.
- ◆ Benefiting from the TDMA technology, the radio allows twice the channels based on the same spectrum resource. This is can greatly mitigate the growing shortage of spectrum resource
- ◆ Adopting innovative aperture type LED backlight design for operation part, ensure a friendly operation.
- ◆ The digital and analogue channel information can be displayed on TFT screen.
- ◆ Can be used as console when with microphone.
- ◆ Supports forwarding a text message and receiving local MSG feature.
- ◆ Supports to detect analogue/digital signal simultaneously
- ◆ Supports duplexer built-in
- ◆ Support to transfer digital and analogue signal.
- ◆ Optional man down feature
- ◆ Optional GPS feature
- ◆ LED indicator



optional accessory

Technical parameters

General specification

Product	Digital / Analogue Repeater	
Model	TR-6000DM	
Frequency	UHF	VHF
Zone capacity	16	
Channel capacity per zone	16	
Typical RF output	25-40W	25-50W
Frequency range	400 - 470MHz	136 - 174MHz
Dimension(H*W*D)	88 x 483 x 366mm	
Voltage demand	100-240 VAC (13.6 VDC)	
Weight	14kg	
Current consumption:		
Standby	1.0A (100 VAC), 0.5A (240 VAC)	
Transmitting	4.0A (100 VAC), 1.8A (240 VAC)	
Working temperature	-30°C + 60°C	
Max work cycle	100%	
FCC description	ABZ99FT4025	ABZ99FT3025

Receiver

Frequency range	400 - 470 MHz	136 - 174 MHz
Channel spacing	12.5 kHz / 25 kHz	
Frequency stability (-30°C, +60°C, +25°C)	(-30°C, +60°C, +25°C) +/- 0.5 ppm	
Analogue sensitivity	0.25 uV (12 dB SINAD) 0.35 uV (20 dB SINAD) 0.2 uV(Typical)	
Digital sensitivity	5% BER: 0.3uV	
Intermodulation TIA603C ETS	75 dB 70 dB	
Adjacent channel selectivity	60 dB @ 12.5 kHz 70 dB @ 25 kHz	
Spurious rejection TIA603C ETS	75 dB 70 dB	80 dB 70 dB
Audio distortion @ rated audio	3%(Typical)	
Hum & noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz	
Audio response	+1, -3 dB	
Conducted spurious emission	-57 dBm	

Transmitter

Frequency range	400 - 470 MHz	136 - 174 MHz
Channel spacing	12.5 kHz / 25 kHz	
Frequency stability (-30°C, +60°C, +25°C)	+ / - 1.5 ppm (XiR M8260) + / - 0.5 ppm (XiR M8268)	
RF output	25-40W	25-50W
Modulation limit	+ / - 2.5 @ 12.5kHz + / - 5.0 @ 25kHz	
FM hum and noise	- 40 @ 12.5kHz - 45 @ 2kHz	
Conducted /radiated emission	- 36 dBm < 1GHz - 30 dBm > 1GHz	
Adjacent channel power	- 60 dB @ 12.5kHz - 70 dB @ 25kHz	
Audio response	+1, -3 dB	
Audio distortion	3%	
FM modulation	12.5kHz: 11KOF3E 25kHz: 16KOF3E	
4FSK digital modulation	12.5kHz data: 7K60FXD 12.5kHz data and audio : 7K60FXD	
Digital vocoder	AMBE+2™	
Digital protocol	ETSI-TS102 361-1	

Main Features:

- 16 Zones (Digital Channel: 256; Analog Channel: 256)
- 3.5" big & colorful TFT display
- Scan
- Backlight control
- High / Low Power
- Language options
- Profile options
- Keytone control
- Display Mode
- Zone setting

Digital Features:

- SMS
- Group call
- Contact
- Call Log

Analog Features:

- CTCSS
- CDCSS

Double-slot working chart for TDMA

(With speaker microphone, TR-6000DM can be used as base station / dispatching console separately in digital mode.)

