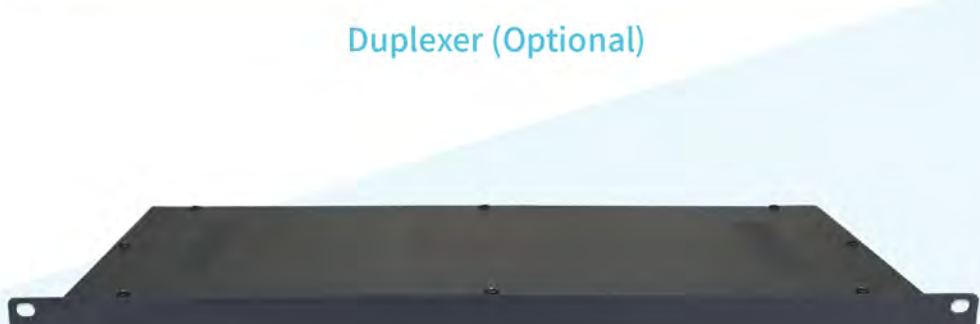
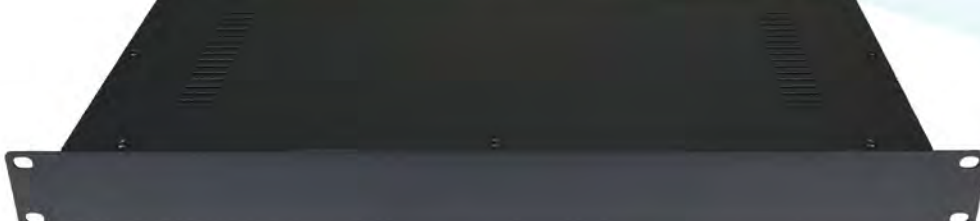


MD-7500



Repeater



Duplexer (Optional)



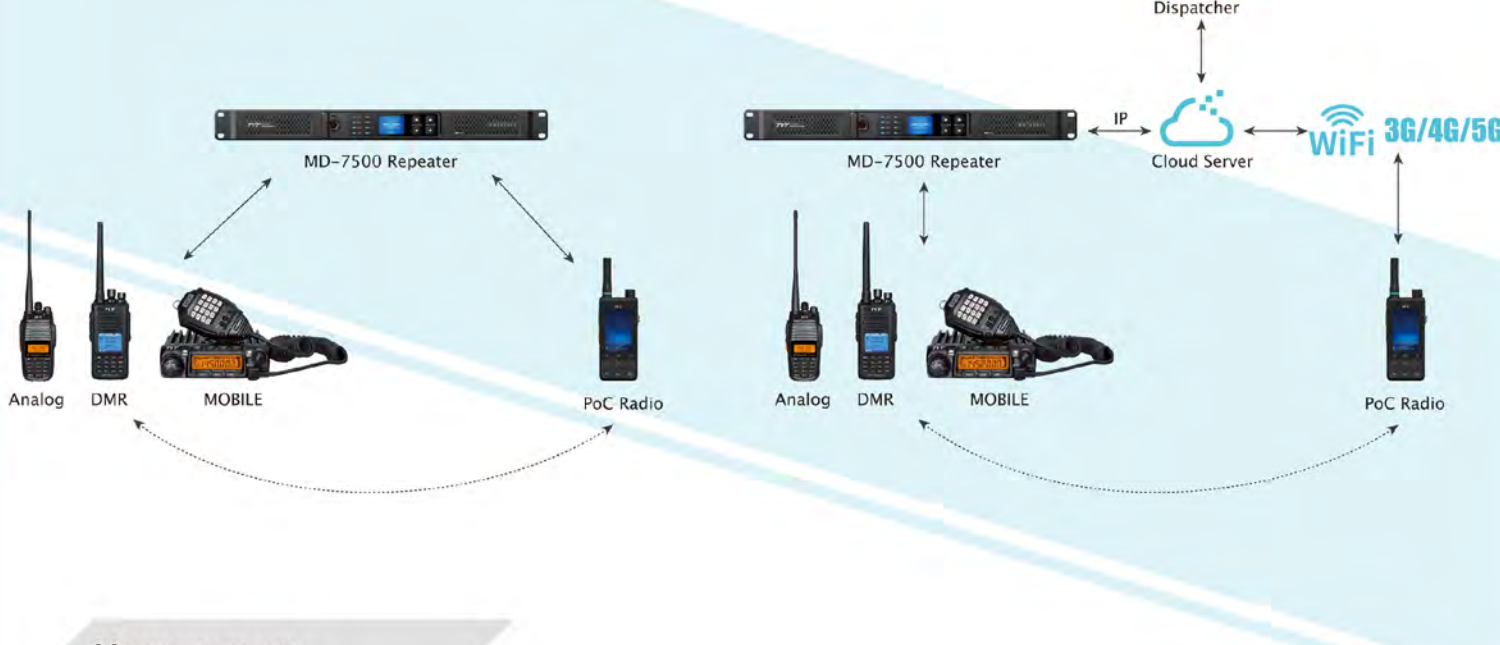
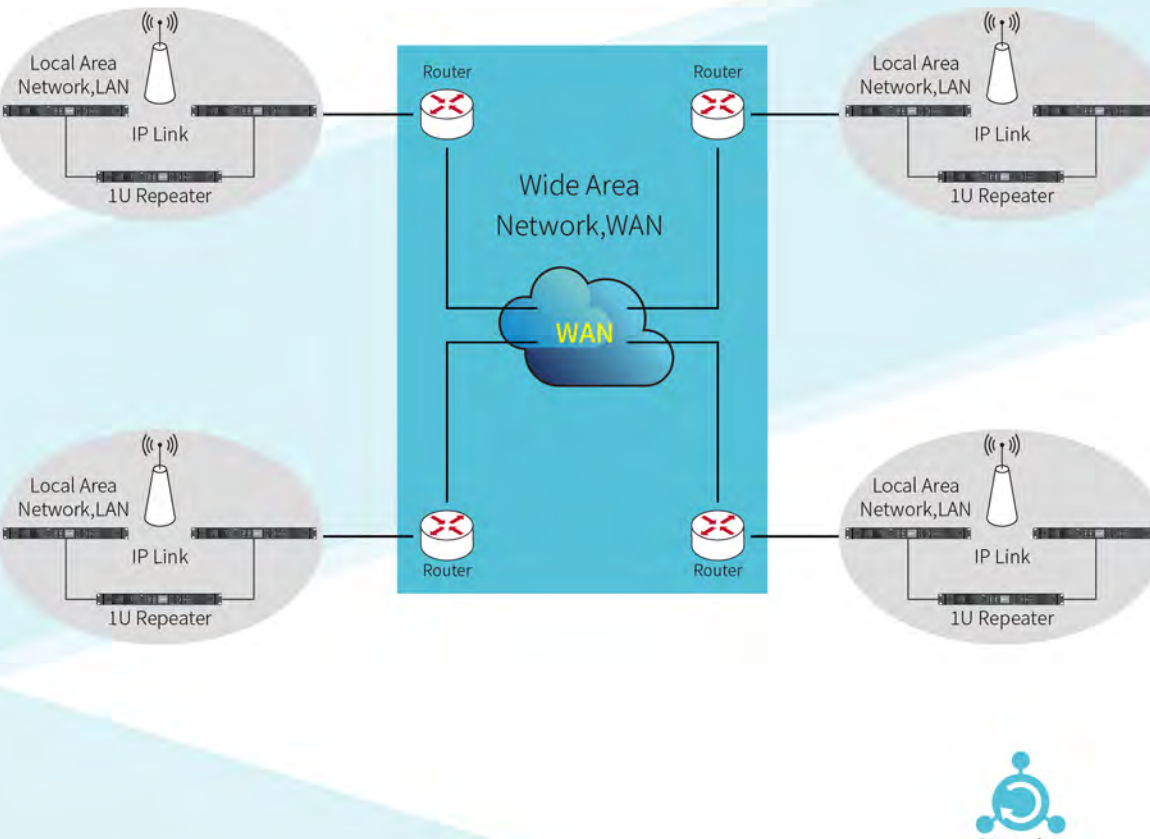
Brief Introduction

The MD-7500 with free networking using advanced TDMA technology and digital voice coding technology is a set of equipment that can free from a radio communication network based on environmental conditions. It can expand the radio carriers coverage, extend the effective communication range, decrease the blind area of communication. The high efficiency of free networking allows you to control the overall situation at critical moments in multiple occasions to achieve unified dispatching and command.

Main features

- The 1U analog & digital dual-mode repeater supports analog and digital dual working modes, adopts inner looping fans, and adopts fully modularized design. It can get into operation immediately after equipped with duplexer and antenna.
- With rugged mechanism, good shielding and excellent heat dissipation
- Adopts TDMA technology and IP link to realize free networking communication, and establishes multiple repeaters in a communication area to achieve voice, SMS, and other communication services within the whole network
- Supports networking via IP, realizing data and voice communication in large but disperse areas.
- Supports analog and digital dual working modes
- Adopts LCD display, showing the real-time working statuses, RX field intensity and TX power of the transceiver
- Easy switch between AC and DC power supply (Optional)
- Ultra-thin size, easy to carry and move
- Be able to initiates a call to radios by speaker microphone, easy to operate and use
- Cross mode repeater between POC and DMR mode or between POC and analog mode (optional)
- There will be audio out when repeater connect to an external speaker via DB26 jack
- 45W ultra-high power to cover long range
- 1-45W output power adjustable
- IP link

IP link working diagram



Measurement



Application places

Suitable for use in rescue, emergency, public security, fireprotection, mountains, forests, hotels, high-rise buildings, property management, railways, airports, security and other industries.



Main functions

Public functions:

- Power on to enter to preset channel
- Switching between AC and DC power supply (Optional)
- Dormancy time setting
- Upgrade
- Programming protection
- Microphone MIC gain level setting
- IP link
- High temperature alarm
- End-tone elimination
- TOT
- Transmitting/receiving unlock alarm
- Transmitting time preset
- Squelch level adjustable
- Cross mode repeater between POC and DMR mode or between POC and analog mode (optional)

DMR functions:

- Dual slots
- Private/group/all call
- Emergency call
- SMS
- Radio check
- Remote monitor
- Radio kill/activate
- Encryption
- Group call channel hang time
- Private call channel hang time

Analog functions:

- CTCSS/DCS
- Repeater MIC gain level setting (only support analog mode)
- 12.5/20/25kHz bandwidth selective
- Analog mode scan
- Analog transmitting hand time

General

Frequency range	136-174MHz/400-470MHz
Channel capacity	64
Channel spacing	12.5/20/25KHz
Working voltage	AC: 13.6V DC: 220V/110V
Current	DC ≤ 1A AC ≤ 0.4A DC ≤ 12A AC ≤ 1.5A (MAX High Power)
Frequency stability	±1 ppm
Antenna impedance	50Ω
Working temperature	-30°C~+60°C
Storage temperature	-40°C~+85°C
ESD	IEC 61000-4-2 (Level 4) ±8kV(contact discharge) ±15kV (air discharge)

Receiving

Sensitivity	Analog: 0.22μV (12dB SINAD) Digital: 0.22μV/BER 5%	
Adjacent channel selectivity	TIA-603	60dB@ 12.5kHz 65dB@ 12.5kHz
	ETSI	70dB@20/25kHz 75dB @20/25kHz
Intermodulation	75dB @12.5/20/15kHz (TIA) 70dB @ 12.5/20/15kHz (ETSI)	
Spurious response rejection	75dB @12.5/20/15kHz (TIA) 70dB @ 12.5/20/15kHz (ETSI)	
Block	90dB TIA	
	84dB (ETSI)	
Signal to noise ratio	40dB @ 12.5kHz	
	43dB @ 20kHz	
	45dB @25kHz	
Rated audio distortion	≤ 3%	
Audio response	+1dB~-3dB	
Receiving spurious emission	-57dB	

Transmitter

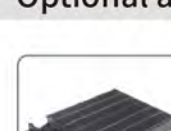
Output power	50W
FM modulation	11KΦF3E @ 12.5KHz
	14KΦF3E @ 20KHz
	16KΦF3E @ 25KHz
4FSK digital modulation	-36dBm<1GHz
	-30dBm>1GHz
Modulation limiting	±2.5KHz @ 12.5KHz
	±4.0KHz @ 20KHz
	±5.0KHz @ 25KHz
FM noise	40dB @ 12.5KHz
	43dB @ 20KHz
	45dB @ 25KHz
Adjacent channel power	60dB @ 12.5KHz
	70dB @ 20/25kHz
Audio response	-1~-3dB
Rated audio distortion	≤ 3%

Standard accessory

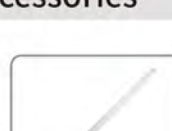


Power cable*1

Optional accessories



Duplexer*1



Antenna*1



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