FM Digital Fiber Optic Repeater

88-108 MHz

JTD7E00G8/JTD7D40A

(Wireless Access)

JIETONG DIGITAL

GET CONNECTED

The FM digital Fiber Optic Repeater (FOR) is designed to solve problems of weak FM radio signal in the place that is far away from the FM radio station and has fiber optic cable network underground.

The system consists of two parts: Master Unit (MU) and Remote Unit (RU). The MU captures the FM radio station signal via donor antenna, the received signal is amplified then digitally processed and converted into an optical signal, and then transmitted to RU via fiber optic cable. The RU will reconvert the optic signal into RF FM radio signal and provide the FM radio signal to the areas where network coverage is inadequate.

Key features

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corrosion
- Adopting WDM and A/D module to realize long-distance digital signal transmission
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Stable and improved signal transmission quality, Noise suppression function and Automatic system delay calibration function
- One MU can support up to 4 links, each link can more RUs to maximize utilization of fiber optic cable, MU and RUs support star and daisy chain topologies
- USB port provides a link to a notebook for local supervision or IP Based NMS(Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater Via Ethernet

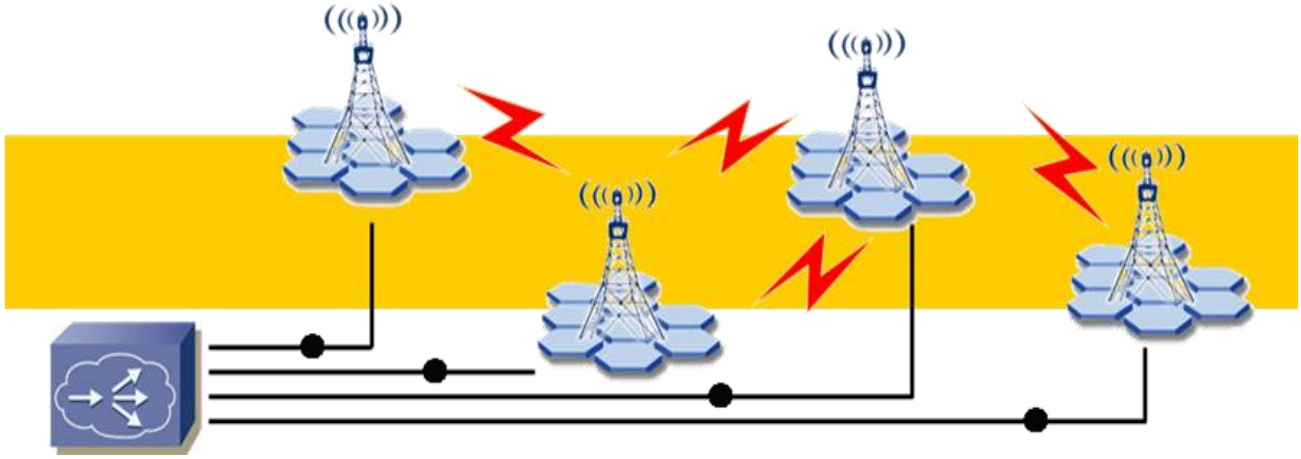
Advantages

☑ Supports 8 channels

☑ Adopting WDM module to realize long-distance transmission

☑ Stable and Improved Signal Transmission Quality

☑ NMS (Network Management System)



Add:11169 2F,No 141,Fu-Gang St. Shilin Dist., Taipei City, Taiwan Tel:+886-2-28828979 Fax:+886-2-28829196 E-Mail: sales@jtd.com.tw

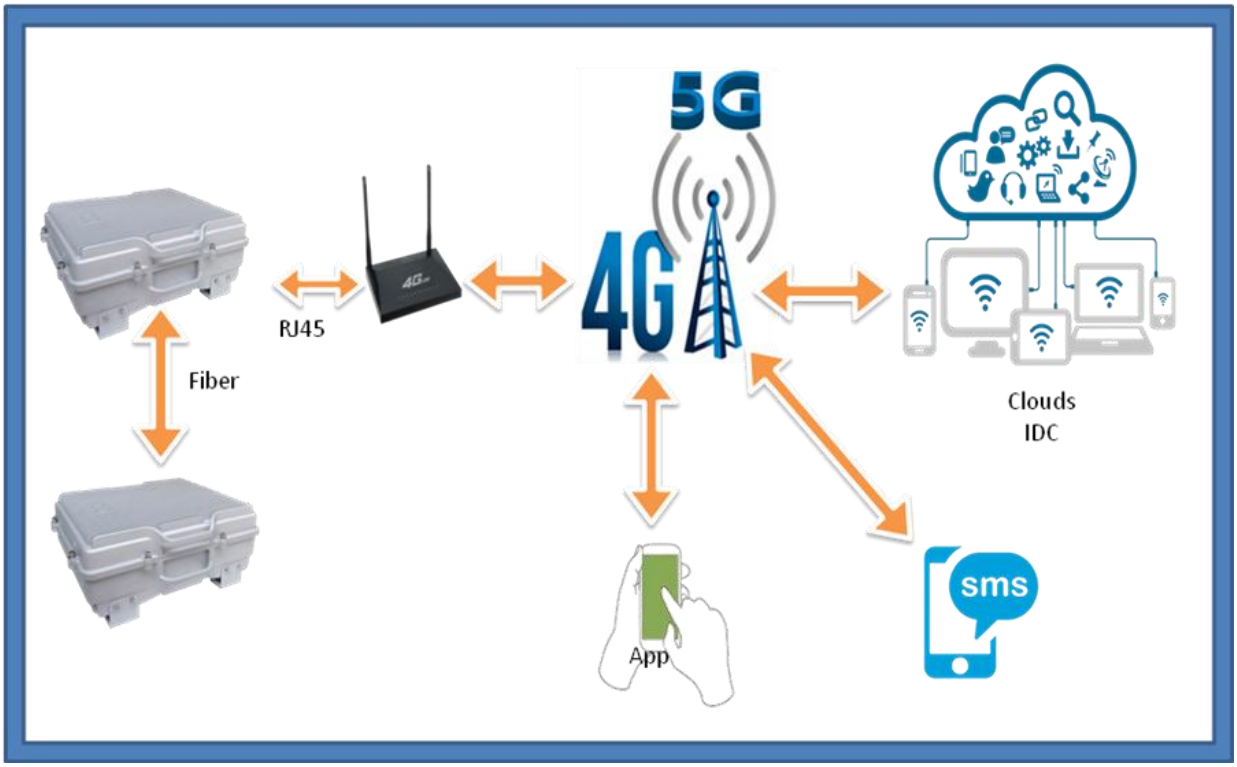
Specifications

Items		Master Unit	Remote Unit
		Specifications	
Frequency Range	Uplink	---	
	Downlink	88~108MHz	
Maximum Input Power (Non-Destructive)		-10dBm	
Transmission Distance		≤ 20km	
Networking Mode		Star, Daisy-Chain and Hybrid Networking	
Composite Output Power		--	40±2dBm
System Gain		90±3dB(MU+RU)	
Gain Adjustment Range		1~31 dB @ step of 1 dB	
AGC Range		≥20dB	
No. of Channels		8	
VSWR		≤ 1.8	
Noise Figure@IRU Connection		≤ 6dB	
Spurious Emission		≤ -36dBm	
Third-Order Inter-Modulation		≤ -36dBc	
System Delay		≤ 35μSec	
I/O Impedance		50Ω	
Connector	RF Connector	1xN-Female	1xN-Female
	Optic Connector	4xFC/APC	2xLC/UPC
Optical Port Speed(Optional)		1.25Gb/s, 2.5Gb/s, 3.02Gb/s, 6.04Gb/s	
Fiber Optical Type		Single Mode	
Optical Output Power		-9dBm~0 dBm	
Optical Receiver Sensitivity		≥-20dBm	
Temperature Range		Operation: -25°C ~ + 55°C	
Relative Humidity Range		≤ 85%/≤ 95% (Non Condensing)	
Power Supply		AC110~220V, 50/60Hz	
Power Consumption		≤ 50W	≤ 180W
Application		Indoor (IP30)	Indoor or Outdoor(IP65)
Mounting		Rack Mounting	Wall or Pole Mounting
Dimensions		485×350×90mm	447×357×171mm
Weight		≤ 6kg	≤ 16kg
Local Control		Via USB Interface or Wi-Fi Hotspot	
Remote Mode(Optional)		Cloud Network Management System Via 4G Wireless Modem	
Interstitial and Broadcast Switching Interface		RJ45	
Manual Switch to Interstitial Function		Key Switch	
Input Power of Interstitial		-20dBm	
Output Power of Monitor		0dBm	

Add:11169 2F,No 141,Fu-Gang St. Shilin Dist., Taipei City, Taiwan Tel:+886-2-28828979 Fax:+886-2-28829196 E-Mail: sales@jtd.com.tw

Connector of Interstitial	N-Female
Connector of Monitor	N-Female

NMS (Network Management System)

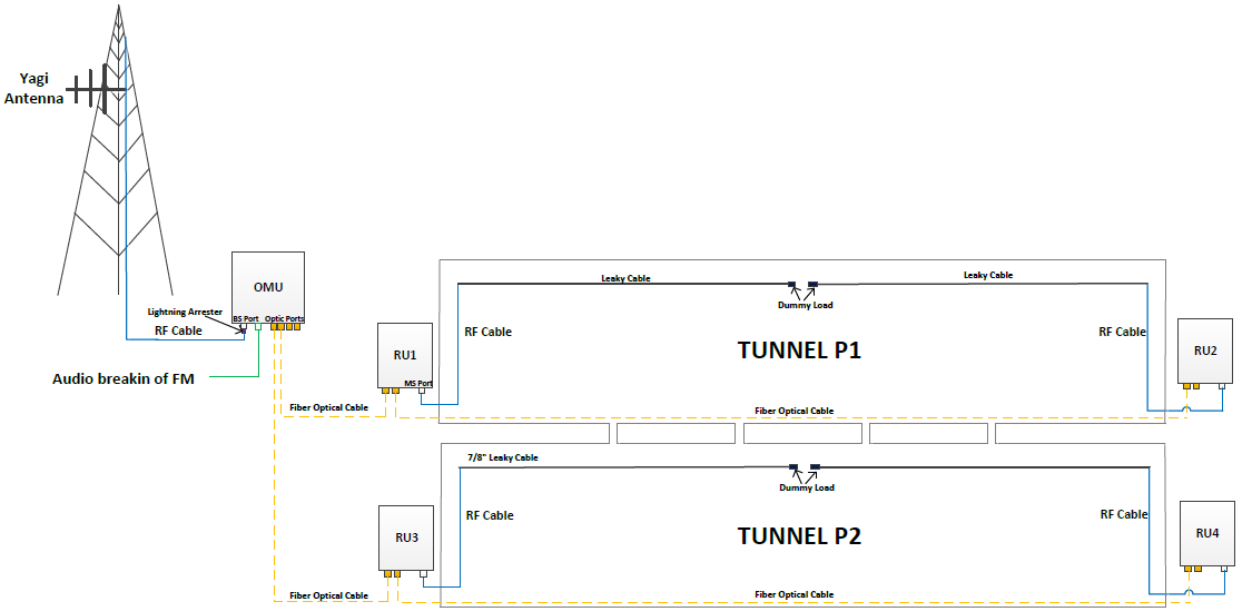


Applications

To expand signal coverage or fill signal blind area where signal is weak or unavailable.

Outdoor: Airports, tourism regions, golf courses, tunnels, factories, mining districts, villages, …

Indoor: Hotels, exhibition centers, basements, shopping malls, offices, parking lots, …



Add:11169 2F,No 141,Fu-Gang St. Shilin Dist., Taipei City, Taiwan Tel:+886-2-28828979 Fax:+886-2-28829196 E-Mail: sales@jtd.com.tw