

FM Digital Fiber Optic Repeater

87.5-108 MHz

JTDVE00GI6/ATVD37A
(Wireless Access)



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

- ☑ Multi_standards/Multi_operators
- ☑ Adopting WDM module to realize long-distance transmission
- ☑ Stable and Improved Signal Transmission Quality
- ☑ NMS (Network Management System)



Specifications

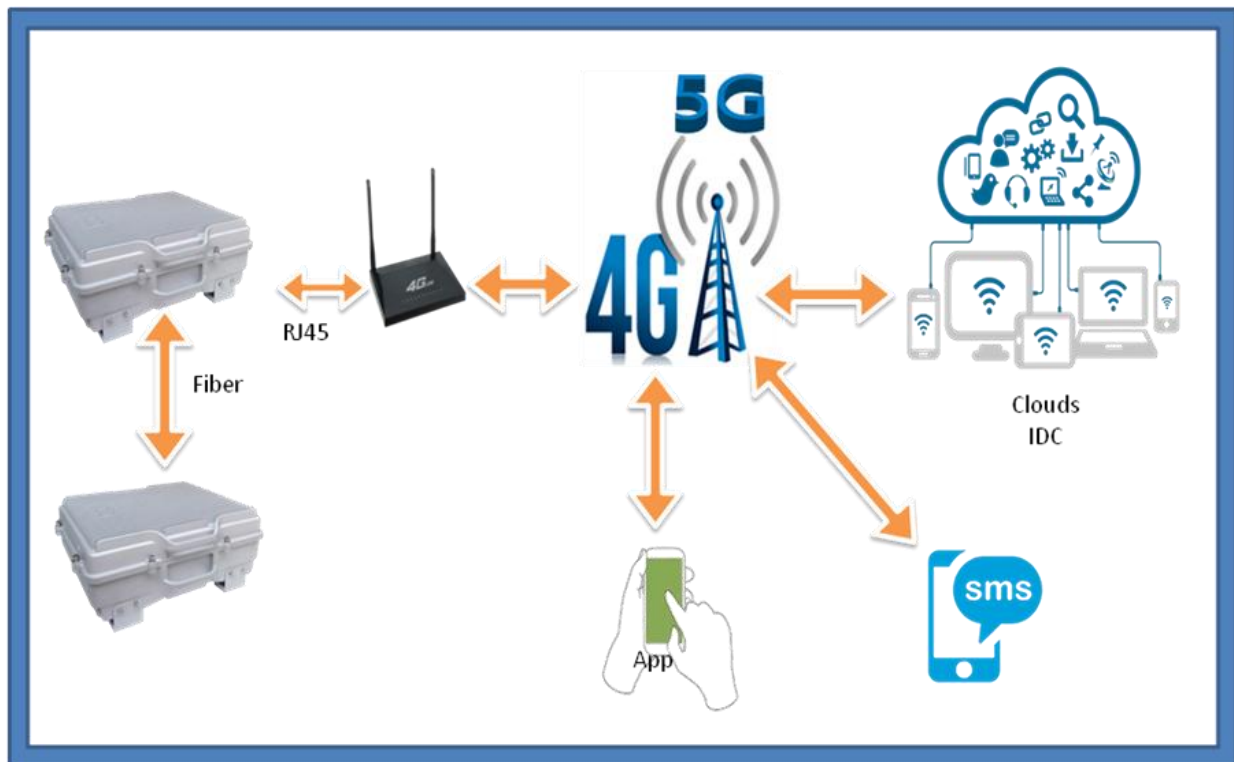
Items		Master Unit	Remote Unit
		Specifications	
Frequency Range	Uplink	---	
	Downlink	88~108MHz	
Maximum Input Power (Non-Destructive)		-10dBm	
Transmission Distance		≤ 20km	
Composite Output Power		--	37±2dBm
System Gain		90±3dB(MU+RU)	
Gain Adjustment Range		1~31 dB @ step of 1 dB	
AGC Range		≥20dB	
No. of Channels		16	
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	4xLC/UPC	2xLC/UPC
Fiber Optical Type		Single Mode	
Optical Output Power		0±3dBm(1310nm) / -3±3dBm(1550nm)	
Optical Receiver Sensitivity		≥ -15dBm	
Temperature Range		Operation: -25°C ~ + 55°C	
Relative Humidity Range		≤ 95% (Non Condensing)	
Power Supply		AC110~220V, 50/60Hz	
Power Consumption		≤ 50W	≤ 120W
Application		Indoor or Outdoor(IP65)	Indoor or Outdoor(IP65)
Mounting		Wall or Pole Mounting	Wall or Pole Mounting
Dimensions		447×357×203mm	447×357×203mm
Weight		≤ 17kg	≤ 17kg
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	
Connector of Interstitial		N-Female	
Connector of Monitor		N-Female	

All specifications are subject to change without notice.

©2021 Jietong Digital Technology Ltd. All Rights Reserved. Website <http://www.jtd.com.tw>

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

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, ...

