

Triple-Band Air Interface Fiber Optic Repeater (Remote Unit 37dbm)



JIETONG DIGITAL

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1800-3500 MHz

Fiber Link-308

LTE1800+ LTE/UMTS2100+5G NR-TDD-3.5GHz

The Air Interface Fiber Optic Repeater (FOR) is designed to solve problems of weak mobile signal in the place that is far away from the Base Transceiver Station (BTS) and has fiber optic cable network underground.

The system consists of two parts: Master Unit (MU) and Remote Unit (RU). The MU captures the BTS signal via donor antenna, then converts it into optic signal and transmits the amplified signal to the RU via fiber optic cable. The RU will reconvert the optic signal into RF signal and provide the signal to the areas where network coverage is inadequate. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

Key features

- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable.
- One MU can support up to 8 RUs to maximize utilization of fiber optic cable (A star topology is supported between MU and RUs).
- Built-in 3.5G Dynamic TDD Sync Detection Module, automatic completion of 3.5G wireless network cell search and wireless signaling processing.
- UBS/RJ45 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**
- ☑ **Smart Mode (Automatically adjust the gain)**
- ☑ **NMS (Network Management System)**

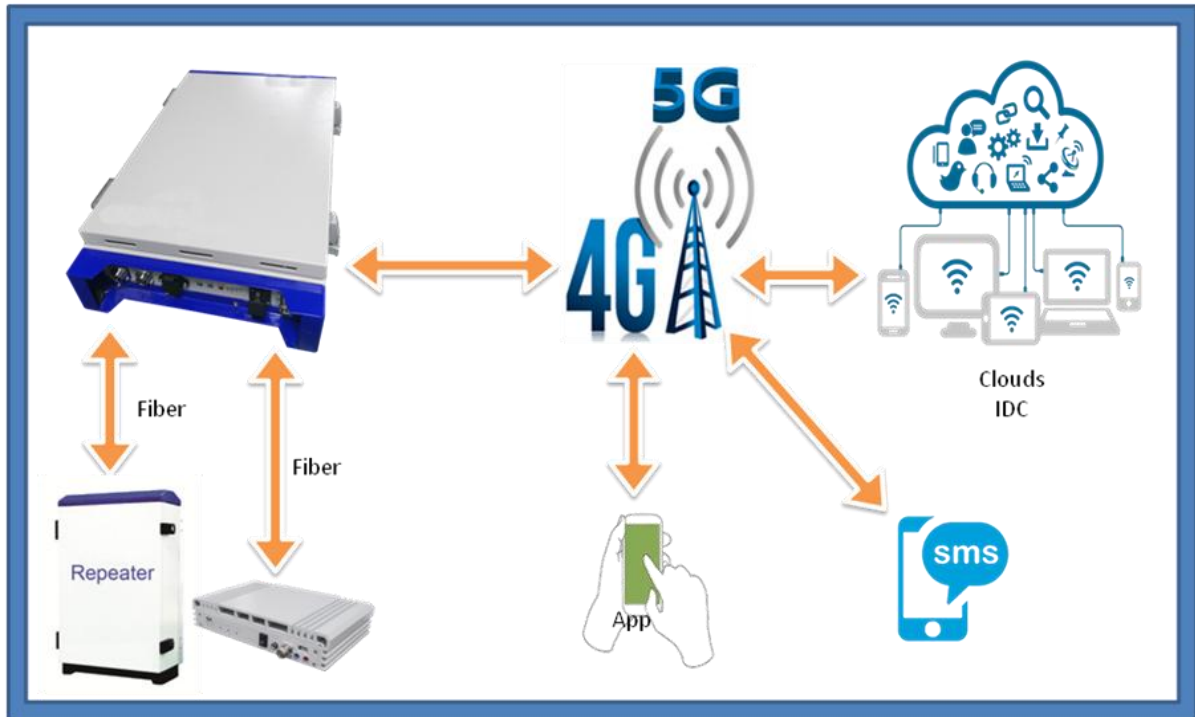


Specifications

Technical characteristics

Item	Specifications
System	LTE1800+LTE/UMTS2100+5GBR TDD-3500
Working Frequency	Uplink 1710~1785 / 1920~1980 / 3300~3570 MHz
	Downlink 1805~1870 / 2110~2170 / 3300~3570 MHz
Working Bandwidth	75/ 60 / 270 MHz
Gain(RU)	50±3dB
AGC/ALC Range	≥10dB
RMS RF Output Power(DL)	≥37dBm Per Band
MGC Range	0~30dB@Step of 1 dB
VSWR	≤ 1.5
System Delay	≤1.5μs
Noise Figure@Max. Gain	≤5dB
Optical Output Power	2±3dBm@1310nm
Fiber Type/Optical Connector Type	Single mode / 1xLC/UPC
Optical Wavelength	1310nm / 1550nm
Smart Mode	Automatically adjust the gain in both links according to the specific environment
RF Connector Type	1xN-Female
I/O Impedance	50Ω
Ingress Protection	Indoor (IP65)
Operating Temperature	-10°C~55°C (Heat Sink Cooling)
Relative Humidity	≤95%
Dimensions	690x420x260mm
Weight	≤40Kg
Power Supply	AC100V ~240V, 50/60Hz; ≤450W
Local Monitoring Interface	USB/RJ45
Remote Monitoring	Cloud NMS via RJ45 Port Provide GUI interface for configuration the MU and RU, remote management each RU by MU, to set the parameters of RU, and monitoring the status and alarms
MTBF	≥50000hours
Mounting Type	Wall Mounting

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, ...

