

Fiber Optic Repeater_Quad Band



1800-3500 MHz

Fiber Link-408(Master unit)

Tone Spread
Solutions for Wireless Signal

LTE1800+LTE2100+5GNR TDD-3500+WiFi

The 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 direct coupler closed to BTS, 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

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corrosion.
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable.
- Stable and improved signal transmission quality.
- Built-in 5G Dynamic TDD Sync Detection Module, automatic completion of 5G wireless network cell search and wireless signaling processing.
- One MU can support up to 8 RUs to maximize utilization of fiber optic cable (A star topology is supported between MU and RUs).
- USB/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

Remote control

Digital features:

Balancing operator level

Low consumption



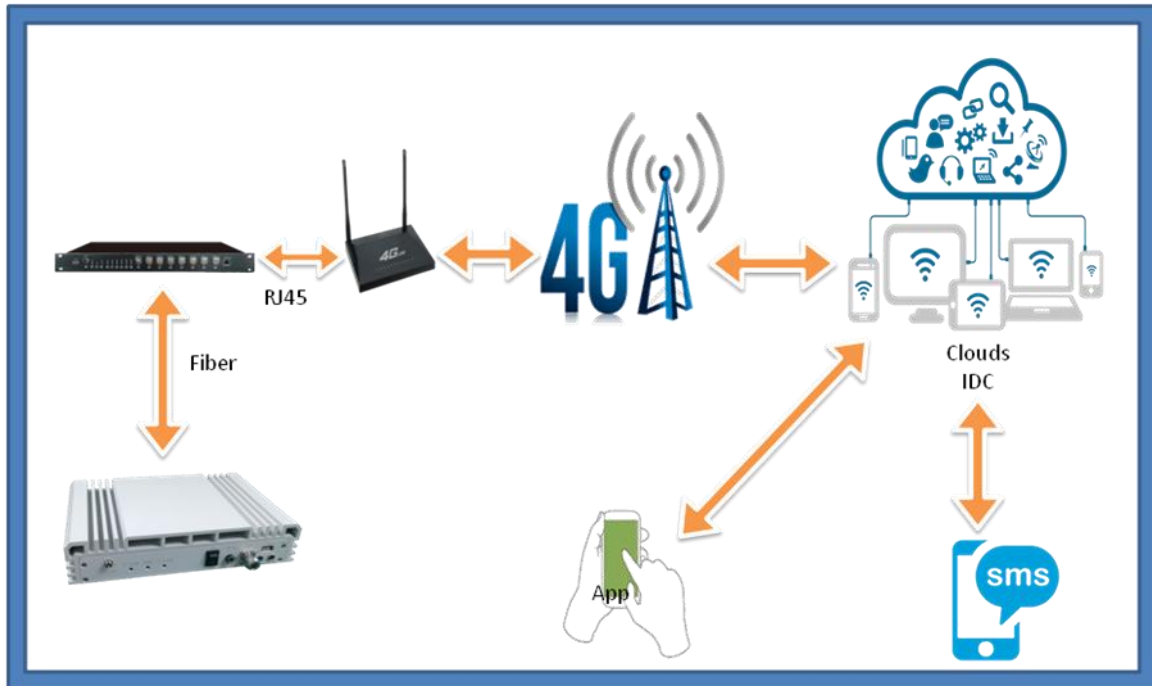
Specifications

Technical characteristics

Item	Specifications
System	LTE1800/LTE2100/5G NR TDD-3500/WiFi2.4GHz
Working Frequency	Uplink 1710~1775MHz/1920~1980MHz/3300~3570MHz/2401~2483MHz
	Downlink 1805~1870MHz/2110~2170MHz/3300~3570MHz/2401~2483MHz
Working Bandwidth	65MHz/60MHz/270MHz/82MHz
Transmission Distance	≤ 3km
Maximum Input Power(Non-Destructive)	10dBm
MU Extensible Support the RU Quantity	8
Maximum Gain(Cable Access)	5±3dB per Band
Maximum RF Output Power	-5±2dBm per Band(UL)
Manual Adjustable Attenuator	0~20dB/Step 1dB
Noise Figure@1RU Connection	≤6dB
Optical Output Power	-6±3dBm @ 1550nm
Fiber Type/Number	Single mode
Optical Receiver Sensitivity	≥ -15dBm
Optical Connector Type	8xFC/APC
RF Connector Type	4xN-Female
I/O Impedance	50Ω
Ingress Protection	IP30
Operating Temperature	-10°C~50°C
Relative Humidity	≤95%
Dimensions	485x350x90mm
Weight	≤8Kg
Power Supply	AC100V ~240V, 50/60Hz
Local Control	Via USB Interface
Remote Mode	IP Connectivity via RJ45 Port(Cloud Network Management System)
Mounting Type	Rack Mounting

※The configuration of the 5G NR TDD synchronous slots for all operators must be the same.

Network Management System (NMS)



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, ...

