

Fiber Optic Repeater_Six Bands



700-3500 MHz Fiber Link-624 (Remote unit)

Tone Spread
Solutions for Wireless Signal

LTE700+LTE900+LTE1800+LTE2100+5GNR (TDD-3500)+Wi-Fi (2.4G)

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 24 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 (Option)**
- ☑ **Low consumption**



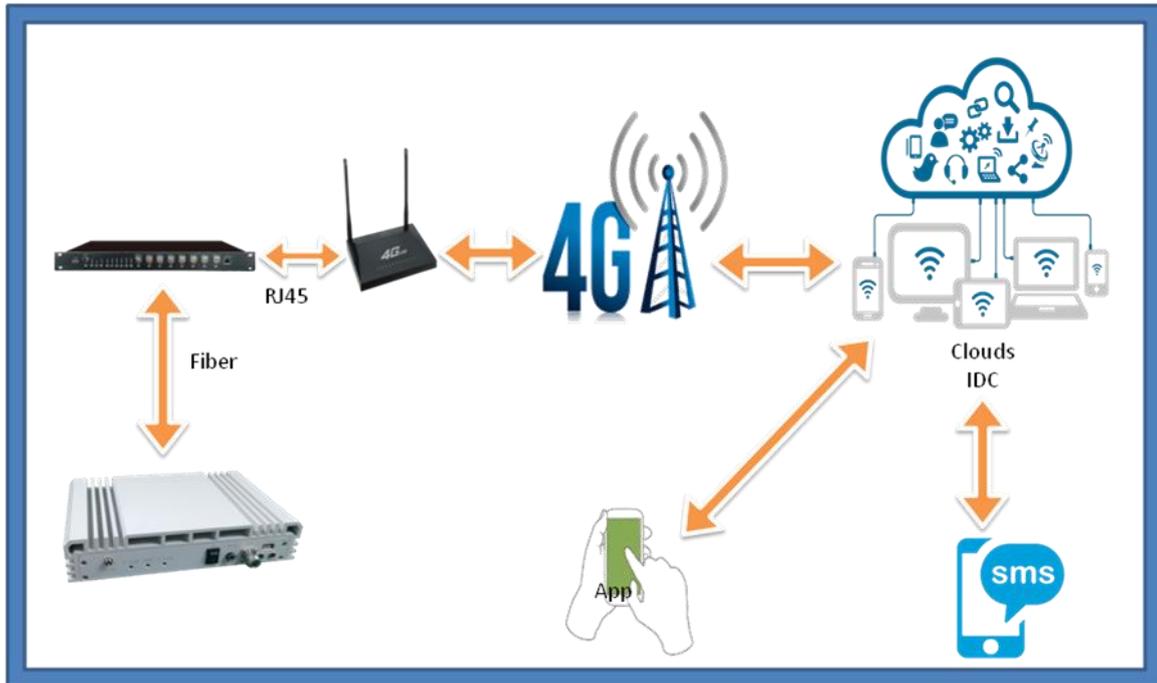
Specifications

Technical characteristics

Item	Specifications
System	LTE700/LTE900/LTE1800/LTE2100/5GNR TDD-3500/Wi-Fi 2.4GHz
Working Frequency	Uplink (MHz) 704~748 /885~915 /1710~1775/1920~1980/2401~2483/3300~3570
	Downlink (MHz) 758~803 /930~960/1805 ~1870/2110~2170/3300~3570/2401~2483
Working Bandwidth	45MHz/30MHz/65MHz/60MHz/270MHz/82MHz
Frequency Stability(+/-0.01ppm)	≤0.01ppm
Gain Flatness	≤±3dB for All Band
AGC/ALC Range	≥10dB
Maximum Gain(Cable Access)	30dB per Band
Maximum RF Output Power	23dBm per Band(DL)
Group (System) Delay	≤1.5us
Noise Figure@Max. Gain (DL/UL)	≤5dB
Optical Output Power	0±3dBm@1550nm
Fiber Type/Number	Single mode
Optical Receiver Sensitivity	≥ -15dBm
Optical Connector Type	1xFC/APC
RF Connector Type	1xN-Female
I/O Impedance	50Ω
Ingress Protection	IP30
Operating Temperature	-10°C~50°C
Relative Humidity	≤95%
Dimensions	318x265x113mm
Weight	≤11Kg
Power Supply	AC100V ~240V, 50/60Hz
Local Control	Via USB Interface
Remote Mode	Through MU via Fiber Optical Cable
Mounting Type	Wall Mounting

※The configuration of the 5GNR 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, ...

