

Fiber Optic Repeater_Penta-Band



900-3500 MHz **Fiber Link-504**(Wireless Access_RU)

Tone Spread
Solutions for Wireless Signal

900 MHz + 1800 MHz + 2100 MHz + 2600 MHz + 3500MHz

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 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

- 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.
- Adopting WDM module to realize long-distance transmission.
- 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 4 RUs to maximize utilization of fiber optic cable, A star topology is supported between MU and RUs.
- Built-in CPE converts RF signal into Wi-Fi, and the Wi-Fi signal is amplified by 2.4G/5.8G AP
- 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**
- ☑ **Fiber Optic Cable Transmission**
- ☑ **Low consumption**



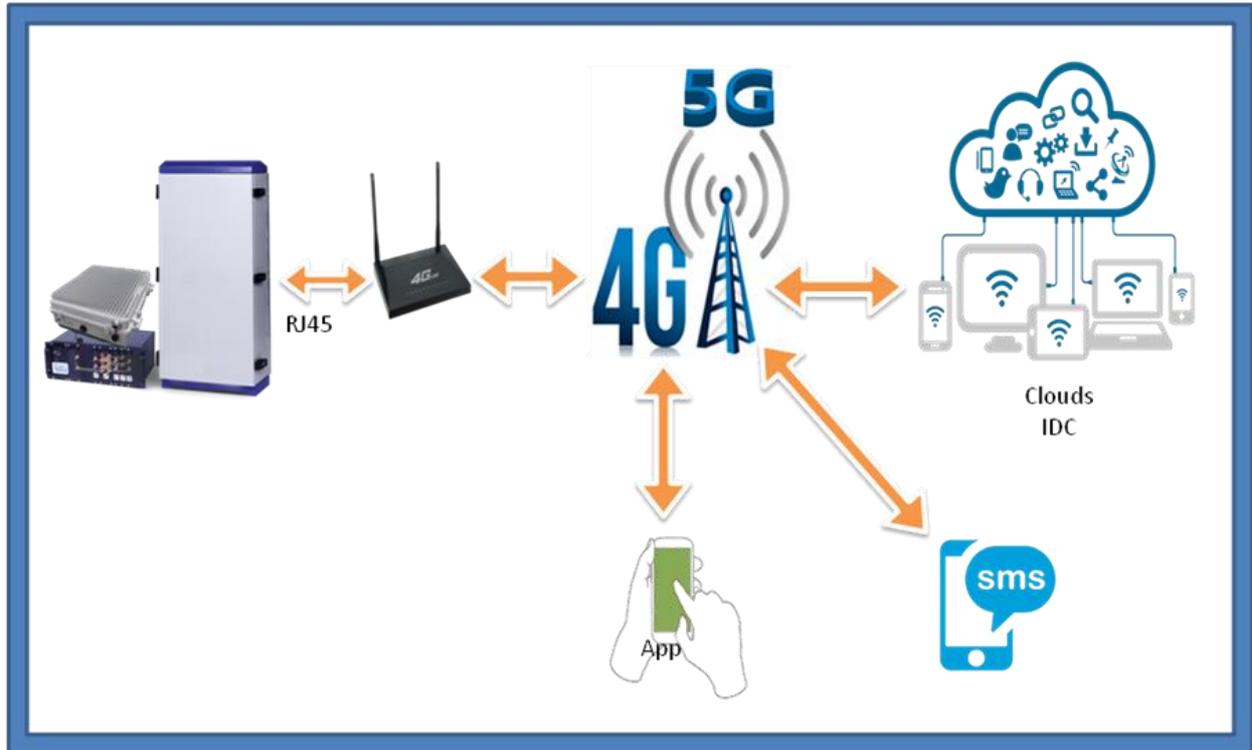
Specifications

Technical characteristics

Item		Specifications
System/Technology		4G/5G
Working Frequency	Uplink	890-915&1710-1785&1920-1980&2500-2570&3420-3510MHz
	Downlink	935-960&1805-1880&2110-2170&2620-2690&3420-3510MHz
Gain of RU		40±3dB
Maximum RF Output Power		DL:27±2dBm per Band
Manual Adjustable Attenuator		0-20dB
AGC/ALC Range		10dB
Maximum RF Input Power		≤0dBm
VSWR		≤1.5
System Delay		≤ 5μs
Fiber Type/Number		Single mode
Optical Receiver Sensitivity		≥-12dBm
Optical Output Power		0±3dBm@1310nm
Optical Connector Type		1xLC/UPC
RF Connector Type		4xN-Female(2 X 4G/5G Signal Ports, 2 X Wi-Fi Signal Ports)
I/O Impedance		50Ω
Mounting Type		Wall or Pole Mounting
Ingress Protection		IP65
Operating Temperature		-10°C-50°C
Dimensions		370*295*152mm
Weight		≤12Kg
Power Supply		48V DC (Power by Optical Power Composite Cable)
LED Indicator		Power Supply, Running, Alarm
Local Control		Via USB Interface and Wi-Fi Hotspot
Remote Control		Through MU Via Fiber Optical Cable
Special Requirements		Built-in CPE and 2.4G&5.8G AP

* Additional portable Wi-Fi route is needed as the maximum transmission distance of Wi-Fi is 150 meters

Network Management System (NMS)

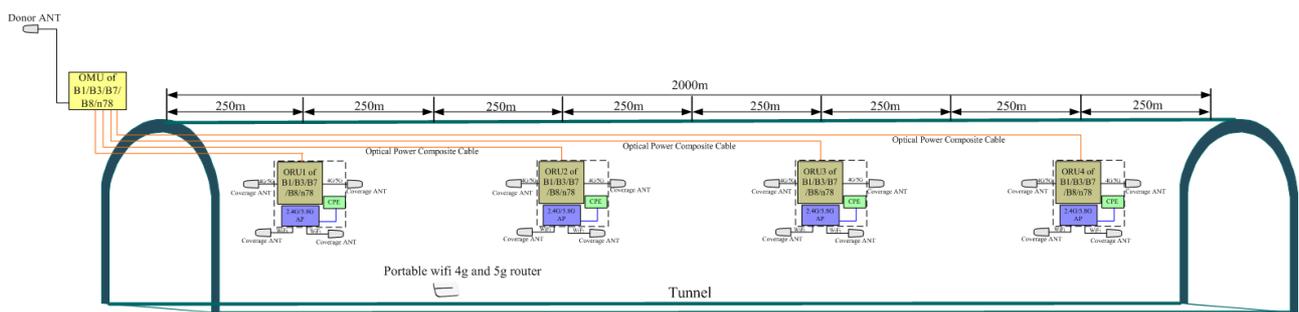


Applications

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, ...



Additional portable WiFi route is needed as the maximum transmission distance of WiFi is 150 meters