

Fiber Optic Repeater_5GNR



Tone Spread
Solutions for Wireless Signal

4800 MHz

Fiber Link-108(Cable Access_MU)

5GNR 4800MHz TDD

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 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**
- ☑ **Fiber Optic Cable Transmission**
- ☑ **Low consumption**

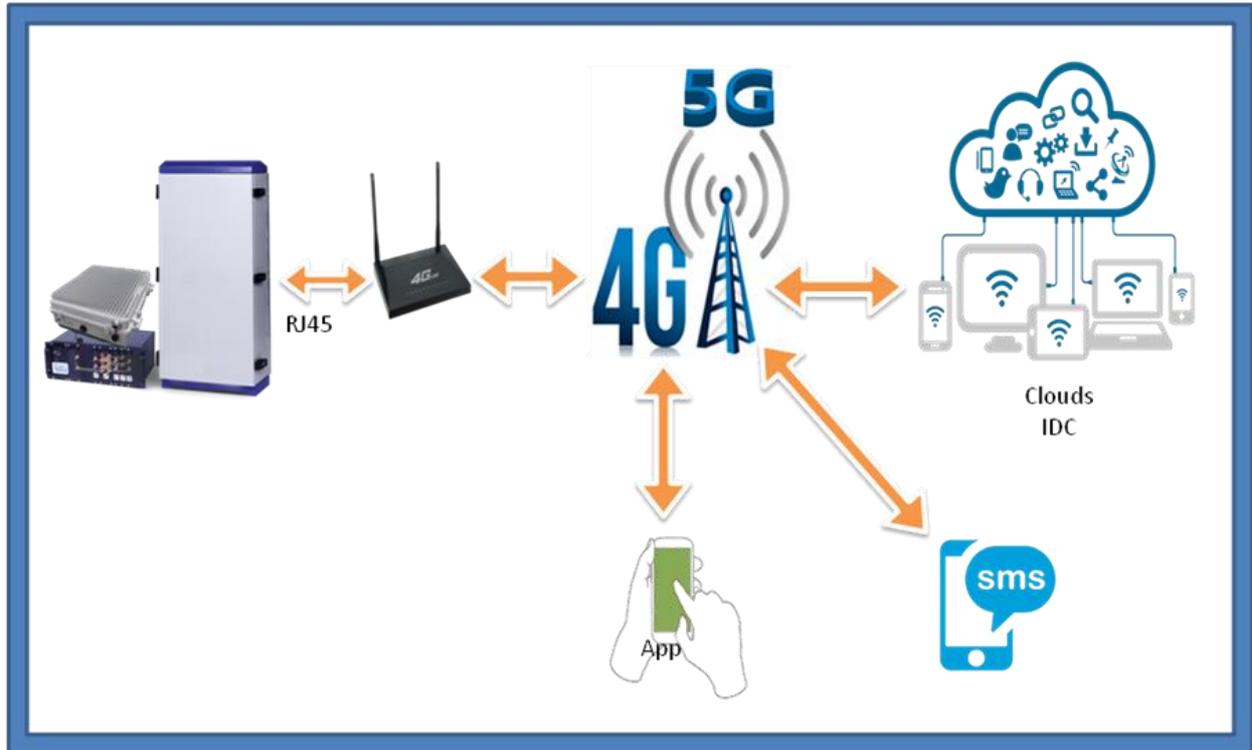


Specifications

Technical characteristics

Item		Specifications
		MU
System		5G NR TDD 4.8GHz
Working Frequency	Uplink	4800~4900MHz
	Downlink	~4900MHz
Working Bandwidth		100MHz
MU Extensible Support the RU Quantity		8
Gain of MU(Cable Access)		5±3dB Per Band
Maximum RF Output Power(UL)		-10±2dBm Per Band
Manual Adjustable Attenuator		0~10dB/Step 1dB
Noise Figure@1RU Connection		≤6dB
Optical Output Power		-6±3dBm@1550nm
Fiber Type/Number		Single mode
Optical Receiver Sensitivity		≥-12dBm
Optical Connector Type		8xFC/APC
RF Connector Type		1xN-Female(1*Tx/Rx Port)
I/O Impedance		50Ω
Ingress Protection		IP30
Operating Temperature		-10℃~50℃
Relative Humidity		≤95%
Dimensions		485*350*43mm
Weight		≤6Kg
Mounting Type		Rack Mounting
Power Supply		AC100~240V, 50/60Hz
Power Consumption		≤30W
Battery Backup/Time		30Minutes
MTBF		>50000hours
Local Control		Via USB Interface
NMS Mode		Cloud NMS via RJ45 Port

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, ...

