

# Fiber Optic Repeater\_5G NR



4800 MHz

**Fiber Link-108**(Cable Access\_RU 23dBm)

**Tone Spread**  
Solutions for Wireless Signal

## 5G NR 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**

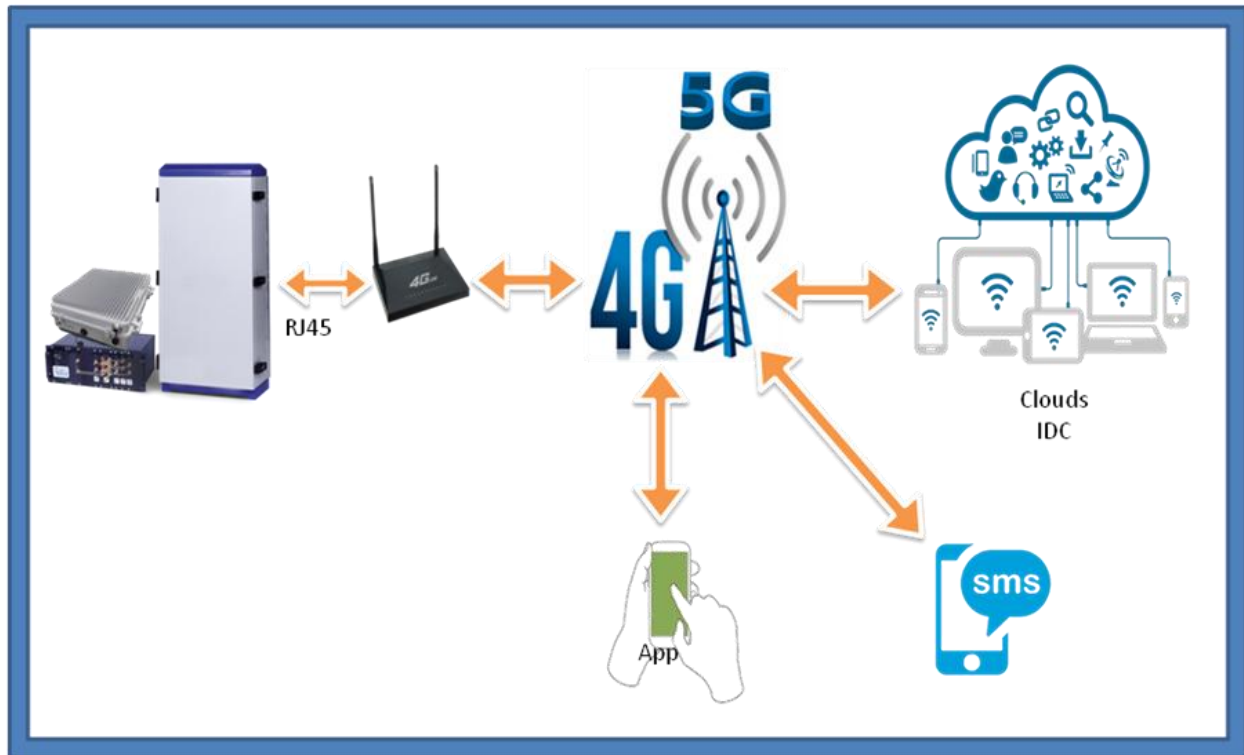


# Specifications

## Technical characteristics

Item		Specifications
		RU
System		5G NR TDD-4.8GHz
Working Frequency	Uplink	4800-4900MHz
	Downlink	4800-4900MHz
Working Bandwidth		100MHz
Frequency Stability		≤0.01ppm
Gain of RU		35±3dB Per Band
RMS Output Power(DL)		23±2dBm Per Band
Manual Adjustable Attenuator		0-20dB/Step 1dB
AGC/ALC		≥10dB
EVM		≤4.5%
ACPR		≤-40dBc
Optical Output Power		0±3dBm@1310nm
Fiber Type/Number		Single mode
Optical Receiver Sensitivity		≥-12dBm
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		188x265x68mm
Weight		≤ 5Kg
Mounting Type		Wall Mounting
Power Supply		AC100-240V, 50/60Hz
Power Consumption		≤ 20W
Cooling Function		Heat Sink
MTBF		>50000hours
Local Control		Via USB Interface
Remote Control		Through MU via Fiber Optical Cable

# 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, ...

