

5GNR n79 Fiber Optic Repeater (Master Unit)

TDD 4800~4900MHz

Fiber Link-104



JIETONG DIGITAL

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TDD-5GNR n79

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/Repeater signal via direct coupler closed to BTS/Repeater, 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

- ✧ Supports 4 x 4 MIMO
- ✧ Stable and improved signal transmission quality. Each Tx/Rx requires one core of fiber optic cable transmission, so 4T4X require four cores fiber optic cable.
- ✧ 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 RU)
- ✧ USB 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
- ☑ Adopting WDM module to realize long-distance transmission
- ☑ Stable and Improved Signal Transmission Quality
- ☑ Smart Mode (Automatically adjust the gain)
- ☑ NMS (Network Management System)

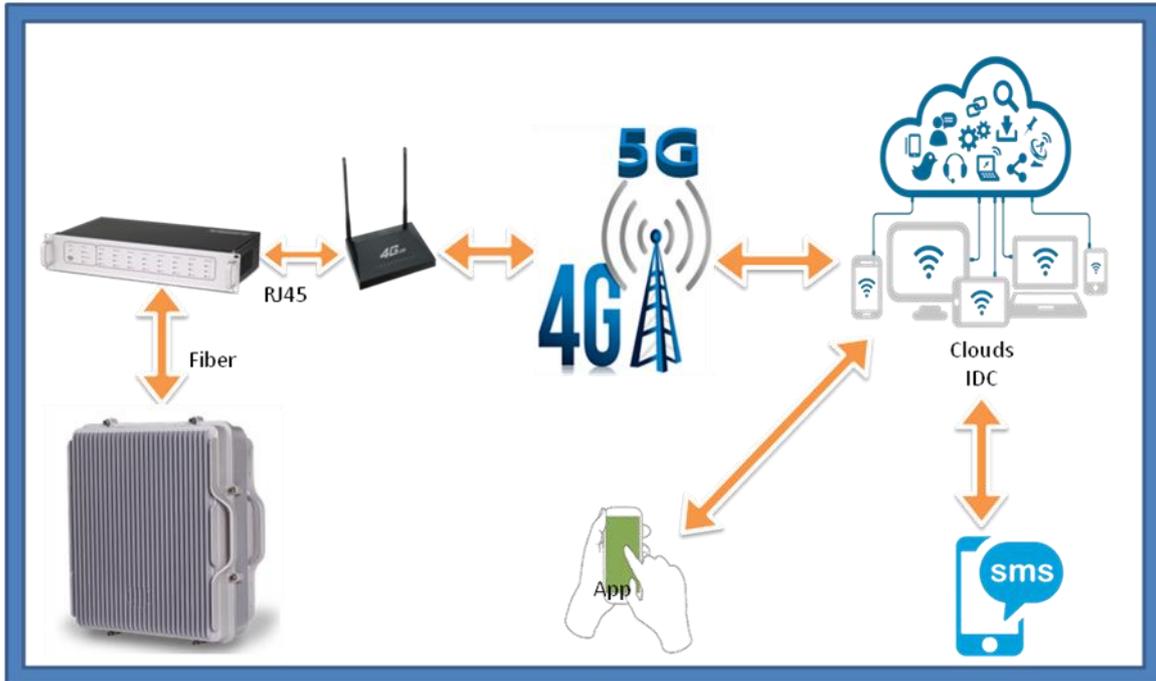


Specifications

Technical characteristics

| Item | | Specifications |
|---------------------------------------|----------|---|
| System | | 5GNR TDD-4900 With 4X4MIMO |
| Frequency Range | Uplink | 4800~4900MHz&4800~4900MHz&4800~4900MHz&4800~4900MHz |
| | Downlink | 4800~4900MHz&4800~4900MHz&4800~4900MHz&4800~4900MHz |
| Working Bandwidth | | 100MHz&100MHz&100MHz&100MHz |
| MU Extensible Support the RU Quantity | | 4 |
| System Gain | | 45±3dB(MU+RU) |
| Maximum Output Power(RF) | | -10±2dBm(Uplink) |
| VSWR | | ≤1.5 |
| Maximum Input Power(Non-Destructive) | | 10dBm |
| Noise Figure@1RU Connection | | ≤ 5dB |
| System Delay | | ≤ 1.5μSec |
| I/O Impedance | | 50Ω |
| RF Connector Type | | 4xN-Female |
| Optical Connector Type | | 16xFC/APC |
| Optical Output Power | | -3±3dBm@1550nm |
| Fiber Type/Number | | Single Mode |
| Optical Receiver Sensitivity | | ≥ -15dBm |
| Power Supply | | AC100~240V, 50/60Hz |
| Application | | Indoor(IP30) |
| Operating Temperature | | -10 ~ +50°C |
| Relative Humidity | | ≤95% |
| Dimensions | | 485x350x90mm |
| Weight | | ≤ 8Kg |
| Mounting Type | | Rack Mounting |
| Local Control Interface | | Via USB and Wi-Fi Hotspot |
| NMS Mode(Optional) | | Cloud NMS via RJ45 Port or 4G Wireless Modem |

NMS (Network Management System)



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, ...

