

# 5GNR n79 Fiber Optic Repeater (Remote Unit)

TDD 4800~4900MHz

**Fiber Link-108**



**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 8 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)

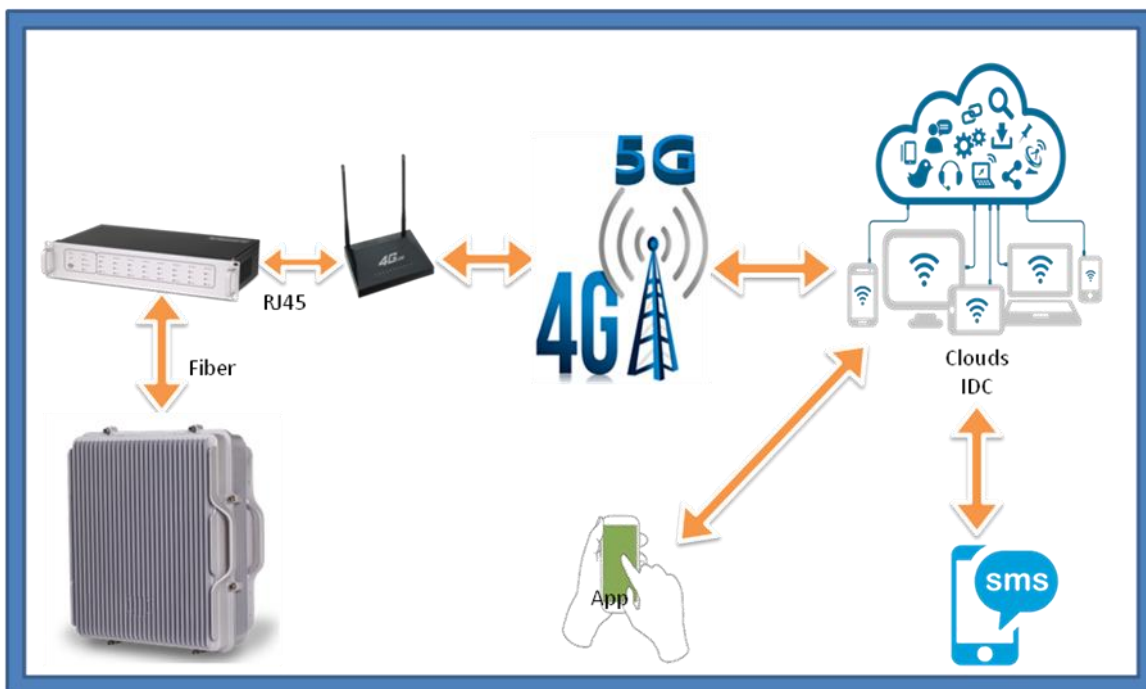


# Specifications

## Technical characteristics

Item	Specifications
System	5G NR TDD-4900 With 4X4MIMO
Frequency Range	Uplink 4800~4900MHz&4800~4900MHz&4800~4900MHz&4800~4900 MHz
	Downlink 4800~4900MHz&4800~4900MHz&4800~4900MHz&4800~4900 MHz
Working Bandwidth	100MHz&100MHz&100MHz&100MHz
Output Power@Bandwidth	40dBm
Manual Gain Adjustable Range	≥20dB/Step 1dB
AGC Range	≥10dB
VSWR	≤1.5
Noise Figure@1RU Connection	≤ 5dB
Spurious Emission	9kHz~1GHz: ≤ -36dBm
	1GHz~12.75GHz: ≤ -30dBm
EVM	≤4.5%
Group Delay	≤1.5us
I/O Impedance	50Ω
RF Connector Type	4xN-Female
Optical Connector Type	4xLC/UPC
Optical Output Power	0±3dBm@1310nm
Fiber Type/Number	Single Mode
Operating Temperature	-25 ~ +55°C
Relative Humidity	≤95%
Application	Indoor or Outdoor(IP65)
Dimensions	500mm×440mm×187mm
Weight	≤30kg
Power Supply	AC100~240V, 50/60Hz
Local Control	Via USB and Wi-Fi Hotspot
NMS Mode	Through MU via Fiber Optical Cable
Mounting Type	Wall Mounting

# 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, ...

