

# Hexa-Band Fiber Optic Repeater (Master Unit)



**JIETONG DIGITAL**

*GET CONNECTED*

**700-3500 MHz**

**Fiber Link-608**

**LTE700+LTE900+LTE1800+ LTE/UMTS2100+WIFI2.4GHZ+5GNR TDD-3500**

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

- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable.
- One MU can support up to 8 RUs to maximize utilization of fiber optic cable (A star topology is supported between MU and RUs).
- Built-in 2.4G Dynamic TDD Sync Detection Module, automatic completion of 2.4G wireless network cell search and wireless signaling processing.
- Built-in 3.5G Dynamic TDD Sync Detection Module, automatic completion of 3.5G wireless network cell search and wireless signaling processing.
- UBS/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**

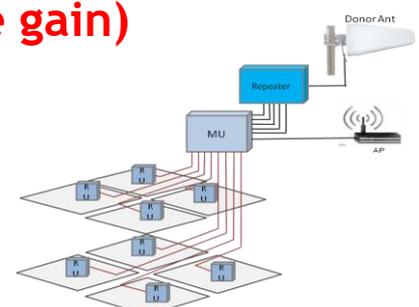
☑ **Adopting WDM module to realize long-distance transmission**

☑ **Stable and Improved Signal Transmission Quality**

☑ **Built-in 2.4G+3.5G Dynamic TDD Sync Detection Module**

☑ **Smart Mode (Automatically adjust the gain)**

☑ **NMS (Network Management System)**

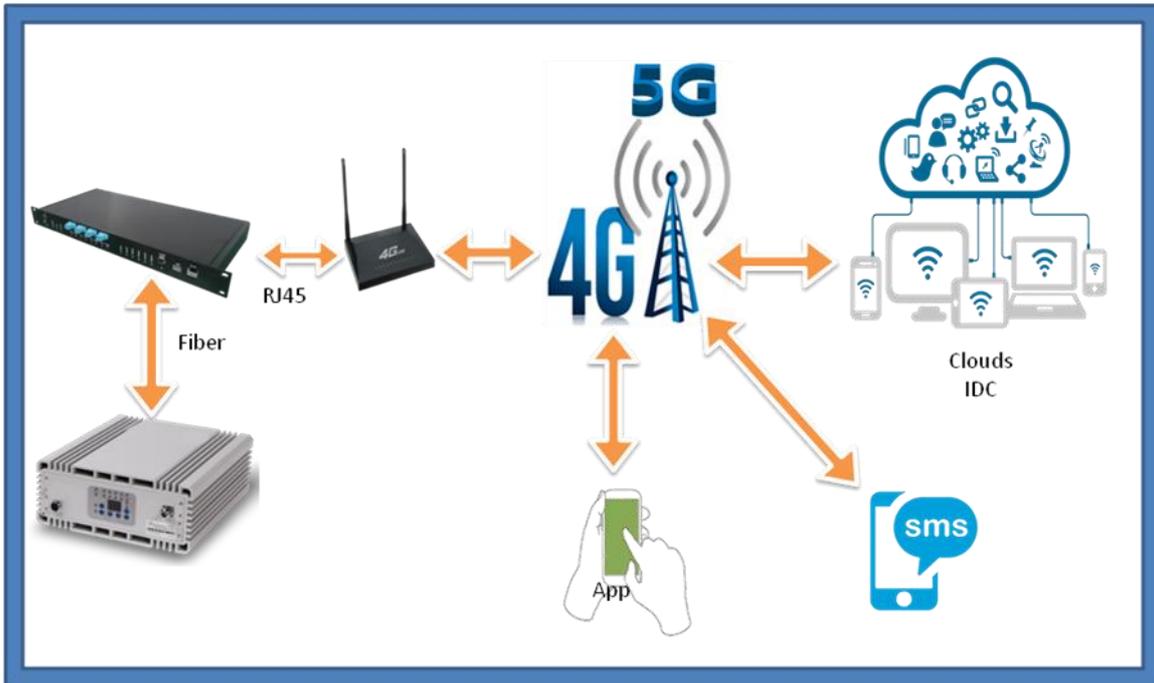


# Specifications

## Technical characteristics

Item	Specifications
System	LTE700+LTE900+LTE1800+LTE/UMTS2100+Wi-Fi2.4G(TDD)+5GNR TDD-3500
Working Frequency	Uplink 703~748 / 885~915 / 1710~1775 / 1920~1980 / 2041~2483/3300~3570 MHz
	Downlink 758~803 / 930~960 / 1805~1870 / 2110~2170 / 2041~2483/3300~3570 MHz
Working Bandwidth	45/30/65/60/82/270 MHz
MU Extensible Support the RU Quantity	8
System Gain(MU+RU)	35±3dB Per Band (Cable Access )
Maximum RF Output Power(UL)	-10±2dBm Per Band
MGC Range	0~31dB@Step of 1 dB
VSWR	≤ 1.5
System Delay	≤1.5μs
Noise Figure@1RU Connection	≤5dB
Optical Output Power	-6±3dBm@1550nm
Fiber Type/Optical Connector Type	Single mode / 8xSC/APC
Optical Wavelength	1310nm / 1550nm
Smart Mode	Automatically adjust the gain in both links according to the specific environment
RF Connector Type	6xN-Female (700/900/1800/2100/2400/3500MHz)
I/O Impedance	50Ω
Ingress Protection	Indoor (IP30)
Operating Temperature	-10°C~50°C
Relative Humidity	≤95%
Dimensions	485x350x43mm
Weight	≤5Kg
Power Supply	AC100V ~240V, 50/60Hz; POE; ≤30W
Local Monitoring Interface	USB/RJ45
Remote Monitoring	Cloud NMS via RJ45 Port
MTBF	>50000hours
Mounting Type	19" Rack 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, ...

