

Triple-Band Fiber Optic Repeater (Remote Unit 23dBm)



Tone Spread
Solutions for Wireless Signal

1800-3500 MHz

Fiber Link-308

LTE1800+LTE2100+5GNR (TDD-3.5GHz)

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 5G Dynamic TDD Sync Detection Module, automatic completion of 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**
- ☑ **Built-in 5G Dynamic TDD Sync
Detection Module Detection Module**
- ☑ **Remote control**
- ☑ **Smart function to set the proper
gain automatically**



Specifications

Technical characteristics

Item	Specifications	
System	LTE1800<E2100&5GNR TDD-3.5GHz	
Working Frequency	Uplink	1710~1785MHz&1920~1980MHz&3300~3570MHz
	Downlink	1805~1880MHz&2110~2170MHz&3300~3570MHz
Working Bandwidth	75MHz&60MHz&270MHz	
MGC(Step Attenuation)	0~20dB @ Step of 1 dB	
Maximum Gain	35±3dB	
VSWR	≤1.5	
Group(System) Delay	≤1.5μs	
Maximum RF Output Power	DL:23±2dBm per Band	
AGC/ALC Function	Support	
AGC/ALC Range	≥10dB	
Fiber Type/Number	Single Mode	
Optical Wavelength	1310nm/1550nm	
Optical Receiver Sensitivity	≥ -15dBm	
Optical Connector Type	1xFC/PC	
RF Connector Type	1xN-Female	
I/O Impedance	50Ω	
Ingress Protection	IP30	
Cooling Function	Heat Sink	
Operating Temperature	-10°C~50°C	
Relative Humidity	≤95%	
Dimensions	318mm×265mm×68mm	
Weight	≤7Kg	
Power Supply	AC100V ~240V, 50/60Hz ≤80W	
Local Control	Via USB Interface	
Remote Mode	Through MU via Fiber Optical Cable	
Mounting Type	Wall Mounting	

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, ...

