

Fiber Optic Repeater_Penta-Band



700-2600 MHz

Fiber Link-104/404(Master Unit)

Tone Spread
Solutions for Wireless Signal

700+900+1800+2100+2600 MHz

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.
- 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 by a notebook or mobile phone with APP.

Advantages

- ✧ **Modular Design**
- ✧ **Adopting WDM module**
- ✧ **Support MIMO(2x2)**
- ✧ **NMS (Network Management System)**
- ✧ **IP Based diversity supports all networks such as browsers/SMS/Apps/E-Mail, etc.**



Specifications

Item		Specifications
System		LTE700<E900<E1800&UMTS/LTE2100<E2600
Working Frequency	Uplink(MHz)	703~748/885~915/1710~1775/1920~1980/2500~2570
	Downlink(MHz)	758~803/930~960/1805~1870/2110~2170/2620~2690
Working Bandwidth		45MHz/30MHz/65MHz/60MHz/70MHz
MU Extensible Support the RU Quantity		8
System Gain(MU+RU)		≥45dB(Cable Access)
Manual Adjustable Attenuator		0~30dB/Step 1dB
Maximum UL RF Output Power		-5±2dBm
Noise Figure@1RU Connection		≤5dB
Optical Output Power		≥3dBm@1550nm
Fiber Type/Number		Single mode
Optical Wavelength		1310nm/1550nm
Optical Connector Type		4(8) x FC/APC
RF Connector Type		5xN-Female
I/O Impedance		50Ω
Ingress Protection		IP30
Local Monitoring Interface		USB2.0/RJ45
Remote Monitoring Module		4/5G Wireless Modem or RJ45 LAN
Operating Temperature		-0℃~55℃
Relative Humidity		≤95%
Dimensions		482.6x222.25x350mm
Weight		≤20Kg
Mounting Type		19" Rack Mount
Power Supply(Customized)		AC100V~240V, 50/60Hz
Power Supply Protection		Include Short Circuit, Over Voltage and Surge protection design
Power Consumption		<50W
Battery Backup/Time		30minutes
MTBF		>50000hours
Monitored Parameters		The downlink RF input signal is displayed as the value after setting the attenuation, display the output power of each Uplink, display the optical output power and input power of the Optical/RF conversion module.

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, ...

