

Five Band Fiber Optic Repeater

Model: FIBER LINK 104/404(Remote Unit)

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: Donor Unit and Remote Unit. The Donor unit captures the BTS signal via direct coupler closed to BTS, then converts it into optic signal and transmits the amplified signal to the Remote Unit via fiber optic cable. The Remote unit 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.



Features

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corroding
- Omni-directional antenna can be adopted to expand more coverage
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Adopting WDM module to realize long-distance transmission
- Stable and improved signal transmission quality
- One Donor Unit can support up to 4 Remote Units to maximize utilization of fiber optic cable
- USB port provides a link to a notebook for local supervision or to the built-in wireless modem to communicate with the NMS (Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater

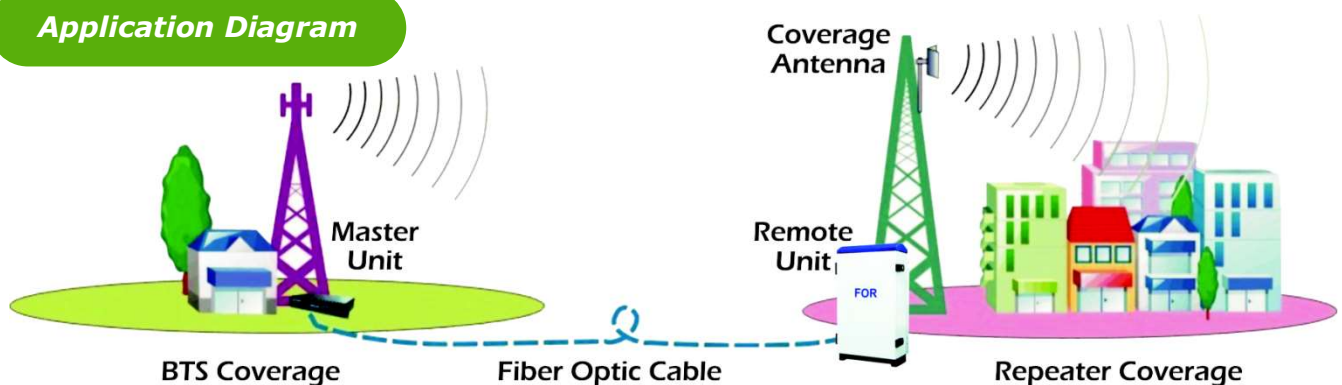
Applications

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, ...

Application Diagram



Technical Specifications

Item		Specifications
Working Frequency	Uplink(MHz)	703~748/885~915/1710~1775/1915~1980/2500~2570
	Downlink(MHz)	758~803/930~960/1805~1870/2110~2170/2620~2690
Working Bandwidth		45MHz/30MHz/65MHz/65,60MHz/70MHz
Frequency Stability(+/-0.01ppm)		≤0.01ppm
RMS Output Power@Bandwidth		≥43dBm
IM3@LTE900<E1800<E2600		≥60dBc
Gain Flatness		≤±3dB for all band
AGC/ALC Function		Support
AGC/ALC Range		10dB
ACLR		3GPP TS 25.104(R10),3GPP TS 36 104(R10)
Noise Figure@Max.Gain(DL/UL)		≤5dB
Spurious and Emissions		3GPP TS 25.143(R10),3GPP TS 36 143(R10)
Intermodulation		3GPP TS 25.143(R10),3GPP TS 36 143(R10)
Out of Band Gain		3GPP TS 25.143(R10),3GPP TS 36 143(R10)
EVM		3GPP TS 25.143(R10),3GPP TS 36 143(R10)
Group(System) Delay		≤1.5us
Ingress Protection		IP65
Cooling Function		Heat sink
Local Monitoring Interface		USB2.0
Remote Monitoring Module		Through MU via fiber
Optical Connector Type		1xFC/PC
RF Connector Type		1xN-Female
Operating Temperature		-25℃~55℃
Relative Humidity		≤85%
Dimensions		980mm×420mm×230mm
Mounting Type		Wall & Pole
Power Supply		AC100V- AC240V, 50/60Hz
Power Supply Protection		Include short circuit, Over Voltage and Surge protection
Power Consumption		≤650W
Battery Backup/Time		30minutes
MTBF		>50000hours
Software Support MU/RU Models		Same EMS support different model of MU/RU Set and display MU and RU ID and Location, adjust the
Adjustable Parameters Function		Downlink/Uplink gain, turn on/off the RF power amplifier, remote turn on/off or restart RU;
Monitored Parameters		Real-time status for downlink output power(RSSI),temperature, optical power;
Alarm Type Classification		Three levels (such as Major, Minor, and Warning)

Alarm Parameters

Real-time alarm for door status, temperature, power supply, vswr, etc;

Interface Remote/Local Software

Terminal software suitable for Windows 7 and the above system

EMS Server

Provide GUI interface for configuration the MU and RU, remote management

each RU by MU, to set the parameters of RU, and monitoring the status and alarms