

1800MHz&2100MHz&2.4GHz Triple-band Fiber Optic Repeater

Model: Fiber Link-308 (Remote Unit 23dbm)

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 and Remote Unit. The Master 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

- 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 Master Unit can support up to 8 Remote Units to maximize utilization of fiber optic cable
- 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/LAN

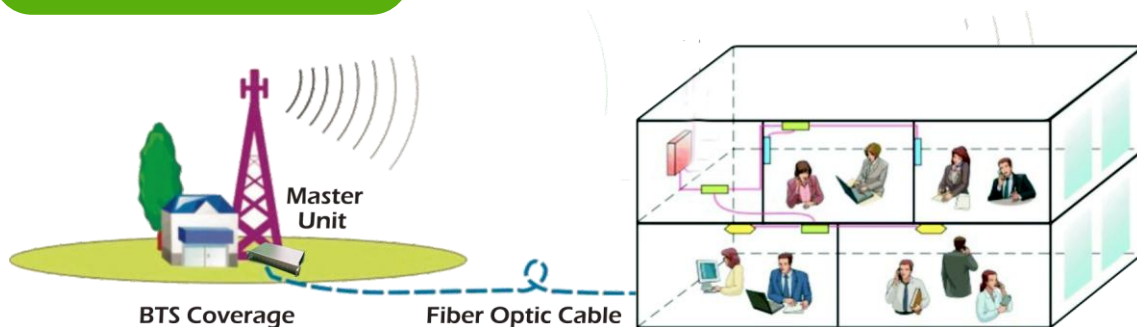
Applications

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				
System	LTE1800&UMTS/LTE2100&WiFi2.4G				
Working Frequency	<table border="1"> <tr> <td>Uplink</td> <td>1710~1775MHz&1920~1980MHz</td> </tr> <tr> <td>Downlink</td> <td>1805~1870MHz&2110~2170MHz&2401~2483MHz</td> </tr> </table>	Uplink	1710~1775MHz&1920~1980MHz	Downlink	1805~1870MHz&2110~2170MHz&2401~2483MHz
Uplink	1710~1775MHz&1920~1980MHz				
Downlink	1805~1870MHz&2110~2170MHz&2401~2483MHz				
Working Bandwidth	65MHz&60MHz&82MHz				
Frequency Stability(+/-0.01ppm)	≤0.01ppm				
RMS Output Power@Bandwidth	23dBm per Band				
Gain Flatness	±3dB for All Band				
AGC/ALC Function	Support				
AGC/ALC Range	10dB				
Noise Figure@Max.Gain(DL/UL)	≤5dB				
Group(System) Delay	≤1.5us				
Ingress Protection	IP30				
Cooling Function	Heat sink				
Local Monitoring Interface	USB2.0				
Remote Monitoring Module	Through MU via Fiber Optical Cable				
Optical Connector Type	1xFC/APC				
RF Connector Type	1xN-Female				
Operating Temperature	-10°C~55°C				
Relative Humidity	≤95%				
Dimensions	318mm×265mm×113mm(TBD)				
Mounting Type	Wall				
Power Supply	AC100V- AC240V, 50/60Hz				
Power Supply Protection	Include short circuit, Over Voltage and Surge protection				
Power Consumption	≤50W				
Battery Backup/Time	30minutes				
MTBF	>50000hours				
Software Support MU/RU Models	Same EMS support different model of MU/RU				
Adjustable Parameters Function	Set and display MU and RU ID and Location, adjust the Downlink/Uplink gain, turn on/off the RF power amplifier, remote turn on/off or restart RU;				
Monitored Parameters Alarm Type Classification	Real-time status for downlink output power(RSSI),temperature, optical power; Three levels (such as Major, Minor, and Warning)				
Alarm Parameters	Real-time alarm for 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