

5G Fiber Optic Repeater

Model: Fiber Link 104 (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: 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

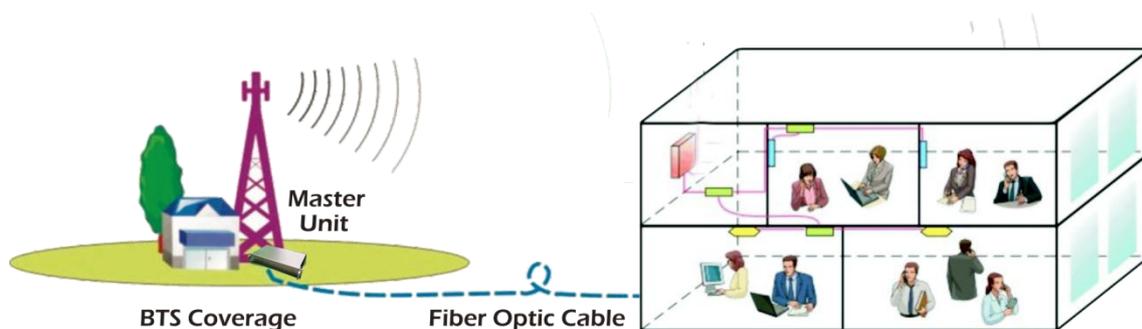
Applications

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 | 5G(TDD) |
| Working Frequency | Uplink 3300~3570MHz |
| (Customized) | Downlink 3300~3570MHz |
| Frequency Stability(+/-0.01ppm) | ≤0.01ppm |
| RMS Output Power@Bandwidth | 43±3dBm(Customized) |
| Gain Flatness | ≤±3dB for All Band |
| AGC/ALC Function | Support |
| AGC/ALC Range | 10dB |
| Noise | ≤5dB |
| Figure@Max.Gain(DL/UL) | |
| System Delay | ≤1.5us |
| Ingress Protection | IP65 |
| Cooling Function | Heatsink |
| Local Monitoring Interface | USB2.0 |
| Remote Monitoring Module | Through MU via Fiber Optical Cable |
| Optical Connector Type | 1xLC/UPC |
| RF Connector Type | 1xN-Female |
| Operating Temperature | -10°C~55°C |
| Relative Humidity | ≤95% |
| Dimensions | 428×328mm×175mm |
| Mounting Type | Wall and Pole |
| Power Supply | AC100V- AC240V, 50/60Hz |
| Power Supply Protection | Include short circuit, Over Voltage and Surge protection |
| Power Consumption | ≤150W |
| 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 | 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 |