

## 4.8GHz Fiber Optic Repeater with 4x4 MIMO

#### Model: Fiber Link-404 (Master 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

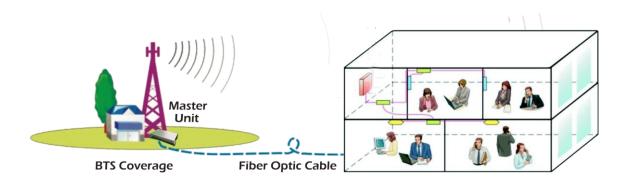
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Adopting WDM module to realize long-distance transmission
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable, LTE MIMO signals via other fiber optic cable
- Stable and improved signal transmission quality
- One Master Unit can support up to 4 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                       |          | TDD-LTE4800 with 4X4 MIMO                           |
| Working                      | Uplink   | 4800~4900MHz&4800~4900MHz&4800~4900MHz&4800~4900MHz |
| Frequency                    | Downlink | 4800~4900MHz&4800~4900MHz&4800~4900MHz&4800~4900MHz |
| Working Bandwidth            |          | 100MHz&100MHz&100MHz&100MHz                         |
| MU Extensible Support the RU |          | 4   |
|                              |          |   |
| System Gain(MU+RU)           |          | 40±3dB(Cable Access)                                |
| Maximum Output Power(RF)     |          |   |
| Manual Adjustable Attenuator |          | 0~30dB/Step 1dB                                     |
| Noise Figure@1RU Connection  |          | ≤ 5dB   |
| Optical Output Power         |          | 0±3dBm@1310nm/0±3dBm@1550nm                         |
| Fiber Type/Number            |          | Single Mode   |
| Optical Wavelength           |          | 1310nm/1550nm                                       |
| Optical Connector Type       |          | 4xFC/APC  |
| RF Connector Type            |          | 4xN-Female  |
| I/O Impedance                |          | 50Ω   |
| Ingress Protection           |          | IP30  |
| Local Monitoring Interface   |          | RJ45  |
| Remote Monitoring            |          | Ethernet/LAN(Web Browser)                           |
| Operating Temperature        |          | -0°C~55°C   |
| Relative Humidity            |          | ≤95%  |
| Dimensions                   |          | 485mm×350mm×90mm                                    |
| Weight                       |          | ≤8Kg  |
| Mounting Type                |          | Wall Mount  |
| Power Supply                 |          | AC100V~240V, 50/60Hz                                |
| Power Consumption            |          | ≤60W  |
| Battery Backup/Time          |          | 30minutes   |
| MTBF                         |          | >50000hours   |