

## 3.5GHz Single Band Fiber Optic Pico Repeater

### *Model: Fiber Link 108(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**

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corroding
- 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

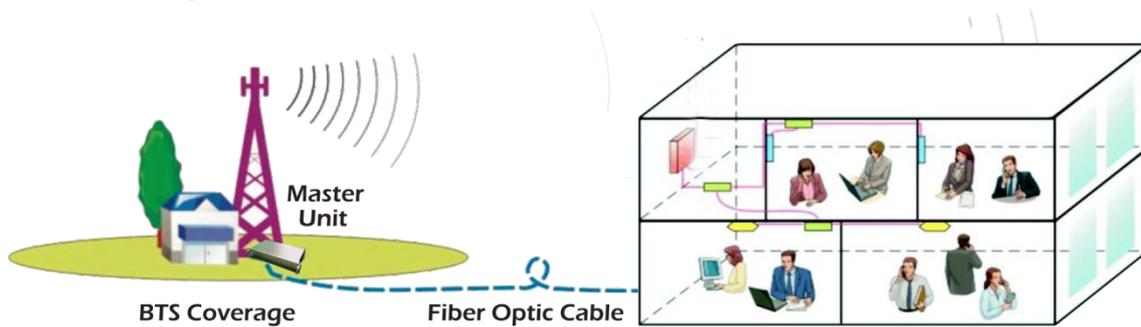
### **Applications**

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
<b>System</b>		5G(TDD)
<b>Working Frequency</b>	<b>Uplink</b>	3300~3570MHz(Customized)
	<b>Downlink</b>	3300~3570MHz(Customized)
<b>MU Extensible Support the RU Quantity</b>		8
<b>System Gain(MU+RU)</b>		40±3dB(Cable Access )
<b>Maximum Output Power(RF)</b>		-5±2dBm(UL)
<b>Manual Adjustable Attenuator</b>		0~30dB/Step 1dB
<b>Noise Figure@1RU Connection</b>		≤5dB
<b>Optical Output Power</b>		2±2dBm@1310nm/-6±2dBm@1550nm
<b>Fiber Type/Number</b>		Single mode
<b>Optical Wavelength</b>		1310nm/1550nm
<b>Optical Connector Type</b>		8xFC/APC
<b>RF Connector Type</b>		1xN-Female
<b>I/O Impedance</b>		50Ω
<b>Ingress Protection</b>		IP30
<b>Local Monitoring Interface</b>		RJ45
<b>Remote Monitoring</b>		Ethernet/LAN(Web Browser)
<b>Operating Temperature</b>		-0°C~55°C
<b>Relative Humidity</b>		≤95%
<b>Dimensions</b>		318mm×265mm×68mm(TBD)
<b>Weight</b>		≤10Kg
<b>Mounting Type</b>		Wall Mount
<b>Power Supply</b>		AC100V ~240V, 50/60Hz
<b>Power Supply Protection</b>		Include Short Circuit, Over Voltage and Surge protection design
<b>Power Consumption</b>		<50W
<b>Battery Backup/Time</b>		30minutes
<b>MTBF</b>		>50000hours