

3.5GHz Single Band Fiber Optic Pico Repeater

Model: Fiber Link 108(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.

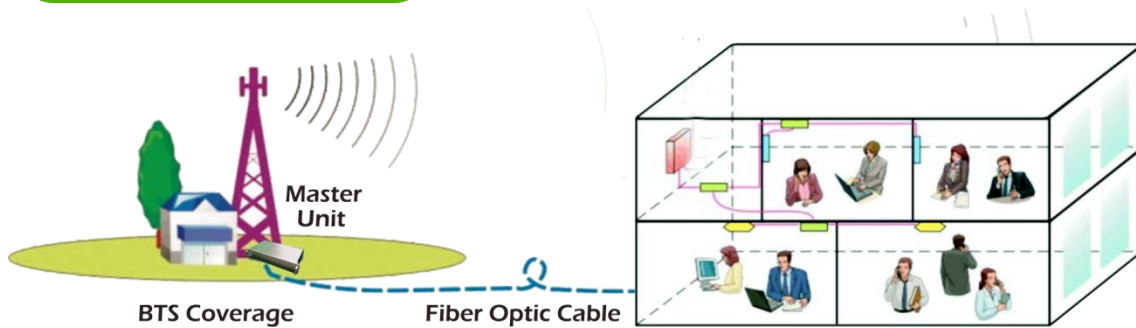
Outdoor: Airports, tourism regions, golf courses, tunnels, factories, mining districts, villages, ...

Indoor: Hotels, exhibition centers, basements, shopping malls, offices, parking lots, ...



Tone Spread
Solutions for Wireless Signal

Application Diagram



Technical Specifications

Item		Specifications
System		5G(TDD)
Working Frequency	Uplink	3300~3570MHz(Customized)
	Downlink	3300~3570MHz(Customized)
Frequency Stability(+/-0.01ppm)		≤0.01ppm
RMS Output Power@Bandwidth		20dBm
Gain Flatness		±3dB for All Band
AGC/ALC Function		Support
AGC/ALC Range		10dB
Noise Figure@Max.Gain(DL/UL)		≤5dB
Group(System) Delay		≤5us
Ingress Protection		IP30
Cooling Function		Heatsink
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×68mm(TBD)
Mounting Type		Wall
Power Supply		AC100V- AC240V, 50/60Hz
Power Supply Protection		Include short circuit, Over Voltage and Surge protection
Power Consumption		≤50W



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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 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