

5G Fiber Optic Repeater

Model: Fiber Link 104 (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 optical signal and transmits the amplified signal to the Remote Unit via fiber optic cable. The Remote unit will reconvert the optical 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 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

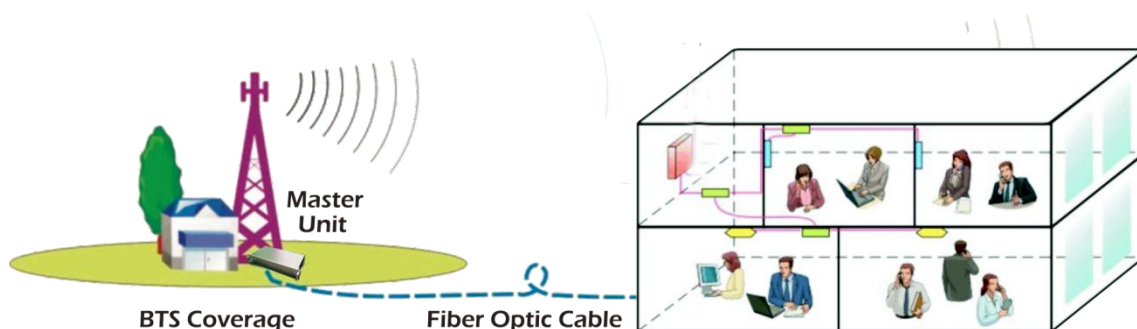
Applications

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		5G(TDD)
Working Frequency (Customized)	Uplink	3300~3570MHz
	Downlink	3300~3570MHz
MU Extensible Support the RU Quantity		4
System Gain(MU+RU)		55±3dB(Cable Access)
Maximum Output Power(RF)		-5±2dBm(UL)
Manual Adjustable Attenuator		0~30dB/Step 1dB
Noise Figure@1RU Connection		≤5dB
Optical Output Power		0±3dBm@1310nm/-3±3dBm@1550nm
Fiber Type/Number		Single mode
Optical Wavelength		1310nm/1550nm
Optical Connector Type		4xFC/APC
RF Connector Type		1xN-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		436.8x250x88mm
Weight		≤6Kg
Mounting Type		19" Rack Mount
Power Supply		AC100V ~240V, 50/60Hz
Power Supply Protection		Include Short Circuit, Over Voltage and Surge protection design
Power Consumption		<50W
Battery Backup/Time		30Minutes
MTBF		>50000Hours