

# 3.8GHz Fiber Optic Repeater with 4x4 MIMO

#### Model: TSLC00A-9(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

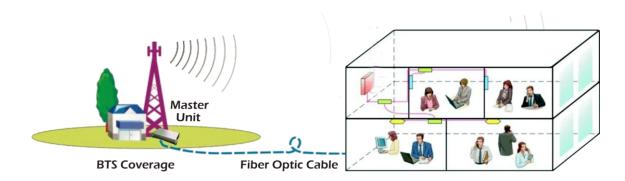
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Adopting WDM module to realize long-distance transmission
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable, LTE MIMO signals via other fiber optic cable
- Stable and improved signal transmission 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**

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System		TDD-LTE3800 with 4X4 MIMO
Working	Uplink	3700~3800MHz&3700~3800MHz&3700~3800MHz&3700~3800MHz
Frequency	Downlink	3700~3800MHz&3700~3800MHz&3700~3800MHz&3700~3800MHz
Working Bandwidth		100MHz&100MHz&100MHz&100MHz
MU Extensible Support the RU Quantity		4
System Gain(MU+RU)		40±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/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