

Air Interface Fiber Optic Repeater



1800-2100 MHz

Fiber Link-204 (Master unit)

Tone Spread
Solutions for Wireless Signal

LTE1800+LTE2100

The Air Interface 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 (MU) and Remote Unit (RU). The MU captures the BTS signal via air interface, then converts it into optic signal and transmits the amplified signal to the RU via fiber optic cable. The RU 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.

Key features

- Adopting WDM module to realize long-distance transmission.
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable.
- Stable and improved signal transmission quality.
- One MU can support up to 8 RUs to maximize utilization of fiber optic cable (A star topology is supported between MU and RUs).
- USB/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.

Advantages

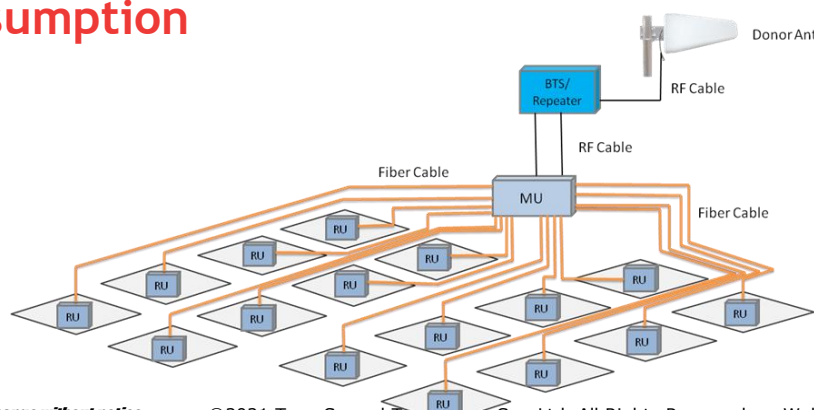
☑ **Multi_standards/Multi_operators**

☑ **Remote control**

☑ **Digital features:**

Balancing operator level (Option)

☑ **Low consumption**

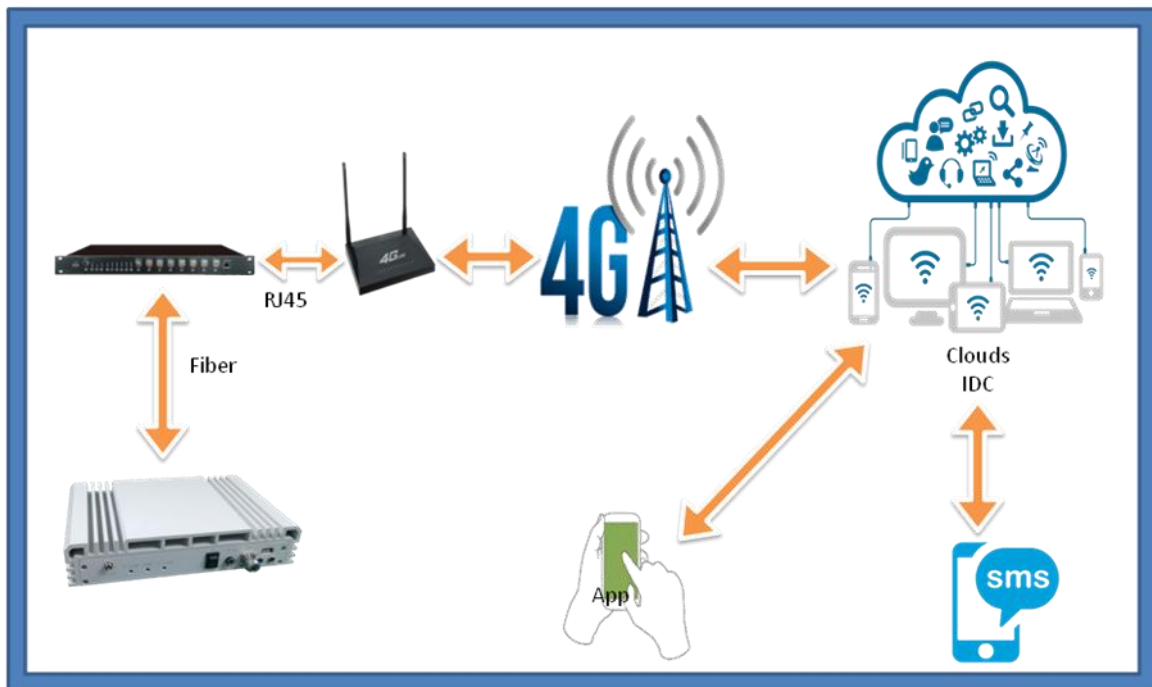


Specifications

Technical characteristics

Item	Specifications	
System	LTE1800/UMTS<E2100	
Working Frequency	Uplink (MHz)	1710~1775/1920~1980
	Downlink (MHz)	1805 ~1870/2110~2170
Working Bandwidth	65MHz/60MHz	
Transmission Distance	≤2km	
Maximum Input Power(Non-Destructive)	≥10dBm	
MU Extensible Support the RU Quantity	8	
System Gain(MU+RU)	40dB±3(Cable Access)	
Maximum RF Output Power	-5±2dBm per Band(UL)	
Manual Adjustable Attenuator	0~30dB/Step 1dB	
Noise Figure@1RU Connection	≤5dB	
Optical Output Power	2±2dBm@1310nm/-6±2dBm@1550nm WDM	
Fiber Type/Number	Single mode	
Optical Loss Allowed MU&RU	0~10dB	
Optical Connector Type	8xLC/UPC	
RF Connector Type	2xN-Female	
VSWR	≤1.5	
I/O Impedance	50Ω	
Ingress Protection	IP30	
Operating Temperature	-25°C~55°C	
Relative Humidity	≤95%	
Dimensions	485mm×350mm×88mm(TBD)	
Weight	≤15Kg	
Power Supply	AC100V ~240V, 50/60Hz	
Power Consumption	<50W	
Local Control	Via USB Interface&(LCD&LED Display)	
Remote Mode	IP Connectivity via RJ45 Port(Cloud Network Management System)	
MTBF	>3 years	
Mounting Type	Rack Mounting	

Network Management System (NMS)



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, ...

