

Fiber Optic Repeater_Quad-Band



Tone Spread
Solutions for Wireless Signal

1800-3800 MHz **Fiber Link-404**(Cable Access_MU)

1800 MHz + 2100 MHz + 2600 MHz + 3800MHz

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 (MU) and Remote Unit (RU). The MU captures the BTS signal via donor antenna, 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

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corrosion.
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable.
- Stable and improved signal transmission quality.
- Adopting WDM module to realize long-distance transmission.
- Built-in 5G Dynamic TDD Sync Detection Module, automatic completion of 5G wireless network cell search and wireless signaling processing.
- One MU can support up to 4 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
- Fiber Optic Cable Transmission
- Low consumption

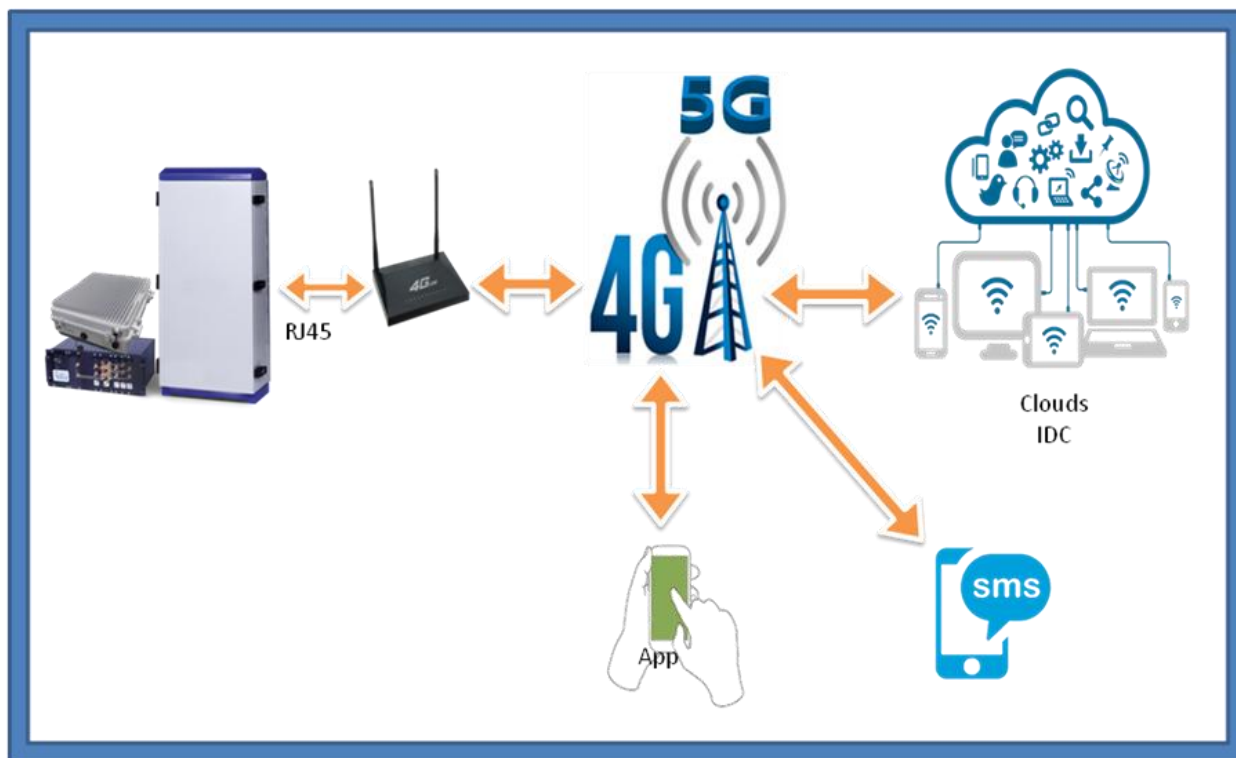


Specifications

Technical characteristics

Items		Specifications			
		MU			
System		DCS/LTE1800	UMTS/LTE2100	5G NR TDD-2600	5G NR TDD-3800
Frequency Range	Uplink	1710~1785MHz	1920~1980MHz	2500~2600MHz	3700~3900MHz
	Downlink	1805~1880MHz	2110~2170MHz	2500~2600MHz	3700~3900MHz
Bandwidth		75MHz	60MHz	100MHz	200MHz
Maximum Input Power (Non-Destructive)		5 dBm			
Transmission Distance		≤ 10km			
Composite UL RF Output Power		-10±2dBm per Band			
Gain of MU		5±3dB per Band			
Manual Adjustable Attenuation		0~10dB			
VSWR		≤ 2.2			
Noise Figure@IRU Connection		≤ 6dB			
Spurious Emission		9kHz~1GHz: ≤ -36dBm 1GHz~12.75GHz: ≤ -30dBm			
System Delay		≤ 5μSec			
I/O Impedance		50Ω			
RF Connector		4*N-Female(One Port per Band)			
Optic Connector		4*FC/APC			
Fiber Optical Type		Single Mode			
Optical Output Power		-3±3dBm@1550nm			
Optical Receiver Sensitivity		≥ -12dBm			
Operation Temperature Range		-10°C ~ + 50°C			
Relative Humidity Range		≤ 85%			
Application		Indoor(IP30)			
Power Supply		AC110~220V, 50/60Hz			
Power Consumption		≤ 30W			
Dimensions		485*350*90mm			
Weight		≤ 8kg			
Mounting		Rack Mounting			
LED Indicator		Power Supply, Running, Alarm			
Local Control		Via USB Interface or WiFi Hotspot			
NMS Mode(Optional)		Cloud NMS via 4G Wireless Modem			

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, ...

