

Specifications of 1800&2100&2600&3800MHz Quad-band Fiber

Optic Repeater_RU

Model:SP-R43-53 P/N: 5.02.04.0021

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 direct coupler closed to BTS, 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.



Features

- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- One MU can support up to 4 RUs to maximize utilization of fiber optic cable, MU and RUs support star topology
- Built-in 5G Dynamic TDD Sync Detection Module, automatic completion of 5G wireless network cell search and wireless signaling processing
- Stable and improved signal transmission quality
- USB 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

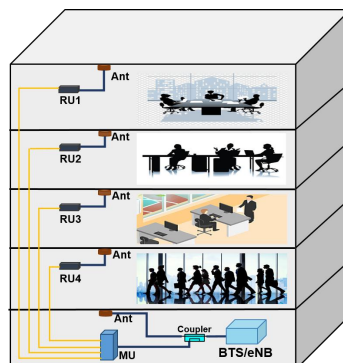
Applications

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

Items	Specifications			
	RU			
System	DCS/LTE1800	UMTS/LTE2100	5GNR n41 TDD-2600	5GNR n78 TDD-3800
Working Frequency				
Uplink	1710~1785MHz	1920~1980MHz	2500~2600MHz	3700~3900MHz
Downlink	1805~1880MHz	2110~2170MHz	2500~2600MHz	3700~3900MHz
Working Bandwidth	75MHz	60MHz	100MHz	200MHz
Maximum DL RF Output Power	43±2dBm	43±2dBm	43±2dBm	37±2dBm
Gain of RU	50±3dB per Band			
Manual Adjustable Attenuation	0~25dB/Step 1dB			
AGC Range	≥ 10dBm			
Noise Figure	≤6dB			
Spurious Emission	9kHz~1GHz: ≤ -36dBm 1GHz~12.75GHz: ≤ -30dBm			
Optical Output Power	0±3dBm@1310nm			
Fiber Type/Number	Single mode			
Optic Receiver Sensitivity	≥ -12dBm			
Optical Connector Type	1*LC/UPC			
RF Connector Type	1*N-Female			
I/O Impedance	50Ω			
Temperature Range	-20°C ~ +55°C			
Relative Humidity	≤95%			
Dimensions	500*440*235mm			
Weight	≤ 45Kg			
Power Supply	AC220V,50/60Hz			
Application	Indoor & Outdoor(IP65)			
Mounting	Wall Mounting			
LED Indicators	Power Supply, Running, Alarm			
Local Control	Via USB Interface and WiFi Hotspot			
Remote Control	Through MU via Fiber Optical Cable			