

Frequency Shift Repeater_Dual-Band



Tone Spread
Solutions for Wireless Signal

700-900 MHz **TS-RP-FSR-90-43** (Cable Access)

700 MHz +900 MHz

The Frequency Shift Repeater (FSR) is designed to solve problems of weak mobile signal, which can expand more coverage than RF repeater and reduce investment for the areas where fiber optic or dedicated cable is not allowed.

The system consists of two parts: Donor Unit and Remote Unit. The Donor Unit receives the BTS (Base Transceiver Station) signal via direct coupler closed to BTS, then converts it from the working frequency to the link frequency, and transmits the amplified signal to the Remote Unit that will reconvert the signal to the working frequency 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.
- Low interference to BTS by adopting linear amplifier with high gain and low noise.
- Stable and improved signal transmission quality.
- Adopting filter with highly selectivity and low insertion loss eliminates interference between uplink and downlink.
- 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**
- ☑ **Frequency Shift**
- ☑ **Low consumption**

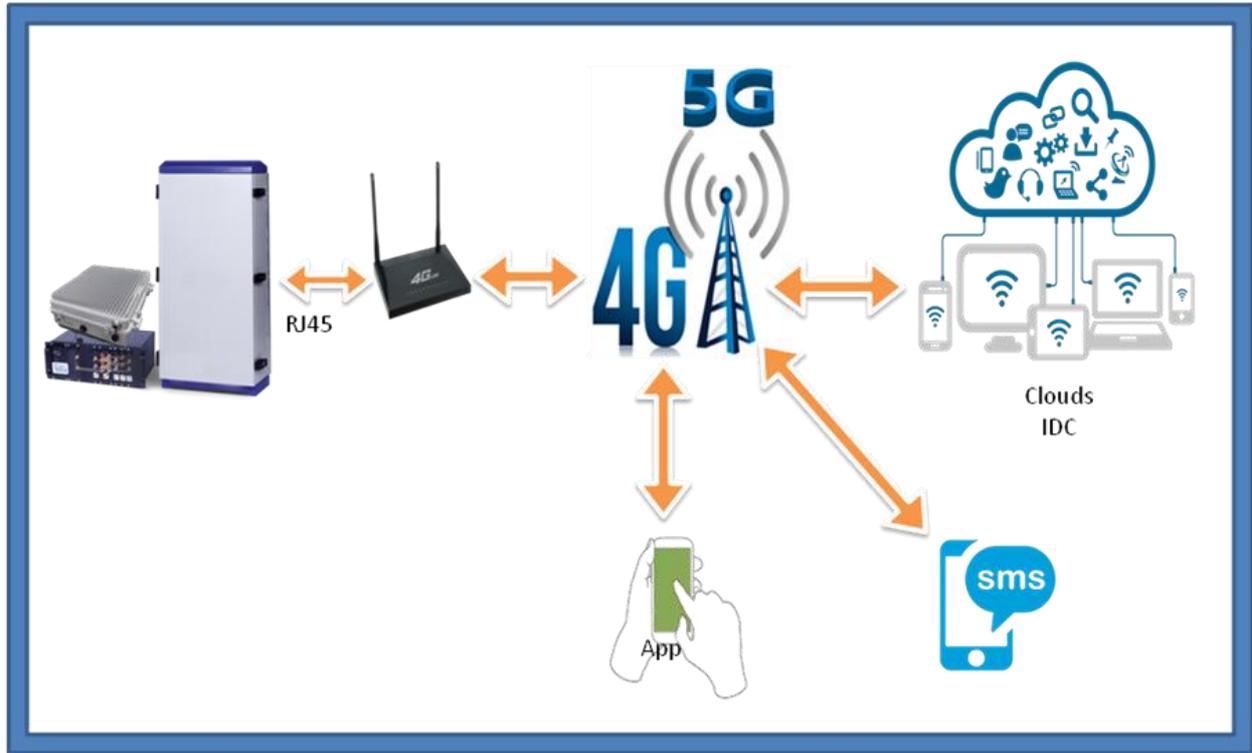


Specifications

Technical characteristics

Item		Donor Unit	Remote Unit
		LTE700<E900	
Working Frequency	Uplink	703-748MHz&885-915MHz	
	Downlink	758-803MHz&930-960MHz	
Link Frequency	Uplink	2400-2484MHz	
	Downlink	2400-2484MHz	
Transmission Distance		≤ 10km	
Maximum Input Power (Non-Destructive)		0dBm	
No. of Channels		1 Carrier per Band(The Effective Working Bandwidth of 700+900MHz cannot Exceed 30MHz)	
Frequency Error		≤ 0.01ppm	
Maximum Output Power	Uplink	-10±2dBm	27±2dBm
	Downlink	40±2dBm	43±2dBm
Maximum Gain(Cable Access)		45±3dB	90±3dB
Gain Adjustment Range		1-31 dB @ Step of 1 dB	
ALC Range		≥ 20dB	
VSWR		≤ 1.5	
Noise Figure		≤ 6dB(Only for Uplink)	
In-Band Ripple		≤±3dB	
EVM		≤ 8%	
System Delay		≤ 10μSec	
Spurious Emission		9kHz~1GHz: ≤ -36dBm 1GHz~12.75GHz: ≤ -30dBm	
I/O Impedance		50Ω	
RF Connector		2x4.3-10 Female	
Temperature Range		Operation: -25°C ~ + 55°C / Storage: -30°C ~ +60°C	
Relative Humidity Range		≤ 95% (Non Condensing)	
Power Supply		DC48V or AC110-220V, 50/60Hz	
Power Consumption		≤ 100W	≤ 220W
Dimensions		447*357*203mm	447*357*203mm
Weight		≤ 20kg	≤ 20kg
Application		Indoor or Outdoor(IP65)	
Local Control		Via USB and Wi-Fi Hotspot	
NMS Mode(Optional)		4G Wireless Modem(Cloud Network Management System)	

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, ...

