

5G NR RF Repeater_Single Band



Tone Spread
Solutions for Wireless Signal

3300-3570 MHz

TS50A37B1 (37dBm)

5G NR TDD-3500

The RF Repeater is designed to provide a more cost-effective solution than adding a new Base Transceiver Station (BTS) to improve signal coverage and communication quality in Radio system. And its easy installation and maintenance can help carrier get fast return.

The repeater is working as a relay between the BTS and mobiles. It receives the low-power signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Coverage Antenna to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

Key features

- Two signal ports with full duplex design.
- 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
- Linear power amplification to effectively suppress inter-modulation and spurious emission.
- Stable and improved signal transmission quality.
- Built-in 5G Dynamic TDD Sync Detection Module, automatic completion of 5G wireless network cell search and wireless signaling processing.
- Smart Automatic Level Control (ALC) ensures output level stable and adjustable continuously.
- Auto Isolation check between service and donor antennas.
- Smart mode to auto-adjust gain according to the isolation and signal level received by donor site.
- 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 or LAN

Advantages

- ☑ **Multi_standards/Multi_operators**
- ☑ **Remote control**
- ☑ **Digital features:**
 - Balancing operator level (Optional)**
- ☑ **Low consumption**



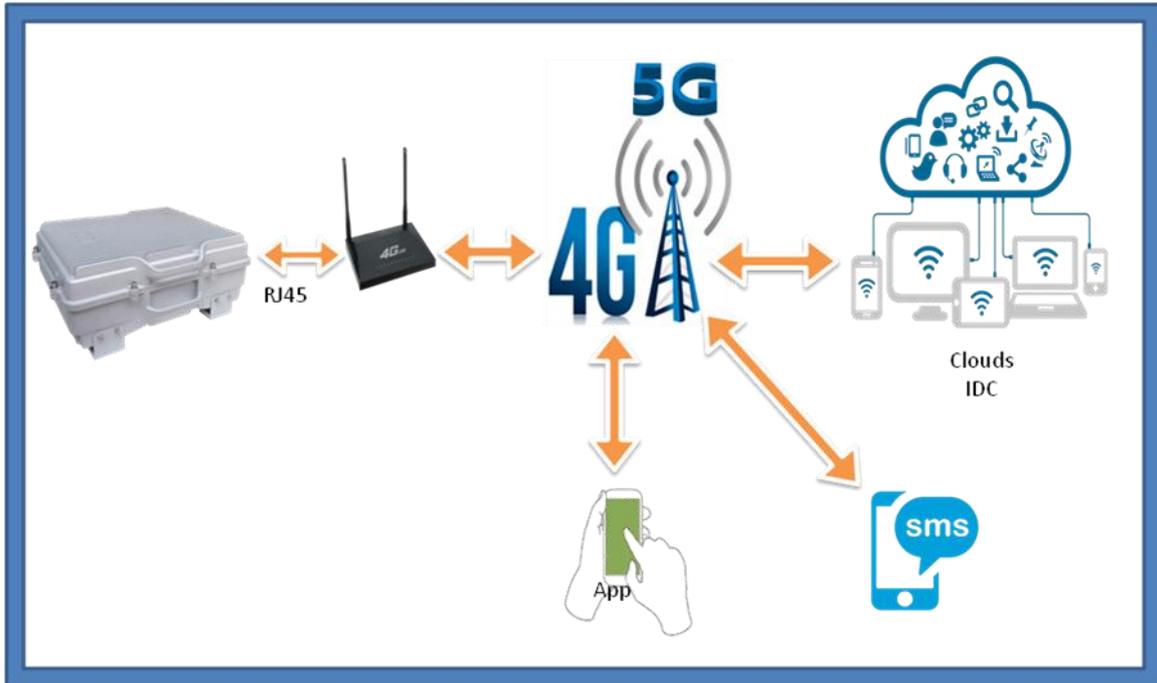
Specifications

Technical characteristics

Item	Specifications	
System	5G NR TDD-3500	
Working Frequency	Uplink	3300~3570MHz
	Downlink	3300~3570MHz
Working Bandwidth	270MHz	
Maximum Output Power	37dBm (DL) 27dBm (UL) per Band	
Maximum Gain	85dB	
AGC Range	≥ 30dB	
MGC Range	0~30dB@Step of 1 dB	
VSWR	≤ 1.5	
System Delay	≤ 5μs	
Noise Figure	≤5dB	
Spurious Emission	9kHz~1GHz: ≤ -36dBm	
	1GHz~12.75GHz: ≤ -30dBm	
Cooling	Convection	
Maximum Input Power (Non-Destructive)	-10dBm	
RF Connector Type	2xN-Female	
I/O Impedance	50Ω	
Ingress Protection	Indoor or Outdoor (IP65)	
Operating Temperature	-25°C~+50°C	
Relative Humidity	≤95%	
Dimensions	447x357x171mm	
Weight	≤16Kg	
Power Supply	AC100V ~240V, 50/60Hz	
Local Control	Via USB and Wi-Fi Hotspot	
Remote Mode	IP Connectivity via RJ45 Port(Cloud Network Management System) or Wireless Modem (Via SMS)	
Mounting Type	Wall or Pole Mounting	

※The configuration of the 5G NR TDD synchronous slots for all operators must be the same.

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, ...

