

5G NR RF Repeater_Single Band



4400-5000 MHz

TS50A37B1-1 (37dBm)

Tone Spread
Solutions for Wireless Signal

5G NR TDD-4800

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



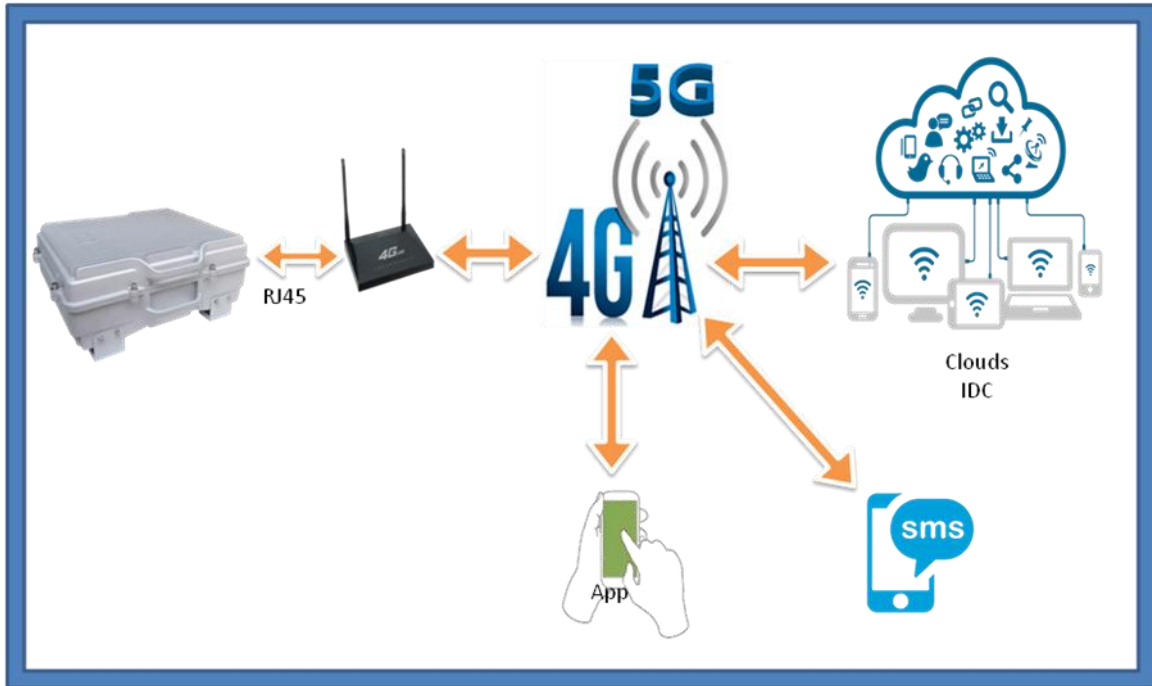
Specifications

Technical characteristics

Item	Specifications
System	5G NR TDD-4800
Working Frequency	Uplink 4400~5000MHz
	Downlink 4400~5000MHz
Working Bandwidth	600MHz
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, ...

