

RF Repeater_Single Band

3500 MHz (TDD)

TS-RP-50A20A-2 (20dBm)



5G NR TDD 3.5GHz

The RF Repeater provides an affordable solution to solve the indoor signal coverage problems due to signal fading and attenuation caused by architecture obstacles. 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 picks up the strongest signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Indoor Signal Distribution System to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

Key features

- Four signal ports with full duplex design.
- Supporting 2x2 MIMO
- 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.
- Simple installation with external AC/DC adapter.
- Cost-effective for practical solutions.

Advantages

- ☑ **Multi_standards/Multi_operators**
- ☑ **Support antenna isolation detection**
- ☑ **Smart function to set the proper gain automatically**
- ☑ **LCD display**



Specifications

| Items | | Specifications |
|---------------------------------------|----------|-----------------------------------|
| System | | 5G NR n78 TDD-3500 (2*2 MIMO) |
| Frequency Range | Uplink | 3300~3570MHz |
| | Downlink | 3300~3570MHz |
| Working Bandwidth | | 270MHz |
| Maximum Output Power | Uplink | 17±2dBm |
| | Downlink | 20±2dBm |
| Maximum Gain | Uplink | 65±3dB |
| | Downlink | 65±3dB |
| AGC Range(UL&DL) | | ≥ 20dB |
| MGC Range(UL&DL) | | ≥ 20dB |
| VSWR | | ≤ 2.0 |
| Noise Figure | | ≤ 7dB |
| Maximum Input Power (Non-destructive) | | ≤ -10dBm |
| System Delay | | ≤ 1.5μs |
| EVM | | ≤ 3.5%@256QAM |
| Spurious Emission | | 9kHz-1GHz: ≤ -36dBm |
| | | 1GHz-12.75GHz: ≤ -30dBm |
| I/O Impedance | | 50 Ω |
| RF Connector | | 4xN-Female |
| Power Supply | | Input:AC100- 240V,50/60Hz |
| Operating Temperature | | -10 ~ +45 °C |
| Application | | Indoor(IP30) |
| Alarm Monitoring System | | Alarm for Uplink Self-Oscillation |
| Isolation Detection | | Isolation Check During Boot Time |
| LED Indicator | | Power Supply, Running, Alarm |
| Dimensions | | 318*265*68mm |
| Weight | | ≤7 kg |
| Relative Humidity Range | | ≤ 85%(Non Condensing) |
| Mounting | | Wall Mounting |

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, ...

