

RF Repeater_Single Band

3500 MHz (TDD)

TS-RP-50A17A-2 (17dBm)



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	14±2dBm
	Downlink	17±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, ...

