

# **5G Wide Band RF Repeater**

#### Model: TS50A30A

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. 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.



#### **Features**

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corroding
- Low interference to BTS by adopting linear amplifier with high gain and low noise
- Adopting filter with highly selectivity and low insertion loss eliminates interference between uplink and downlink
- 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 or LAN

### **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, ...

### **Application Diagram**





## Technical Specifications

Items		Specifications
System		5G(TDD)
Working	Uplink	3420~3510MHz
Frequency	Downlink	3420~3510MHz
Bandwidth		90MHz
Output Power	Uplink	30±2dBm
	Downlink	30±2dBm
Maximum Gain(UL/DL)		85±3dB
Gain Adjustment Range		0-31dB in Step of 1dB
ALC(Auto Level Control)		Input Level Rise 10dB, Output Power Stay at ±2dB
VSWR		≤ 1.5
Spurious Emission		9kHz~1GHz: ≤ -36dBm
		1GHz~12.75GHz:≤-30dBm
Maximum Input power(Non-destructive)		0dBm
Noise Figure		≤ 6dB
System Delay		≤ 1.5µSec
I/O Impedance		50Ω
RF Connector		N-Type (Female)
Temperature Range		-25°C ~ + 55°C
Application		Indoor or Outdoor(IP65)
Power Supply		AC220V±10%, 50/60Hz
Dimensions		428*328*175mm
Weight		≤ 15kg
Humidity		≤ 95%
Local Control		Web Browser GUI Local Via RJ-45 Interface or WiFi Hotspot
Remote Mode(Optional)		Wireless Modem(3G/4G), IP Connectivity
NMS Function(Optional)		Real-time Alarm for Door Status, Temperature, Power Supply,VSWR,etc;
		Remote Control such as Turn On/Off, Increasing/Decreasing
		Output Power, etc; Real-time Status for UL/DL Gain, Input/Output Power, All Status of Repeater etc;