

## 3.8GHz Band Selective RF Repeater

**Model: TS50A37B1**

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.



### Features

- 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
- Built-in TDD-LTE baseband synchronization module, automatic completion of TDD-LTE wireless network cell search and wireless signaling processing
- RJ45 port provides a link to a notebook for local supervision or IP Based NMS (Network Management System) that can remotely supervise Repeaters working status and download operational parameters to the Repeater Via Ethernet or LAN

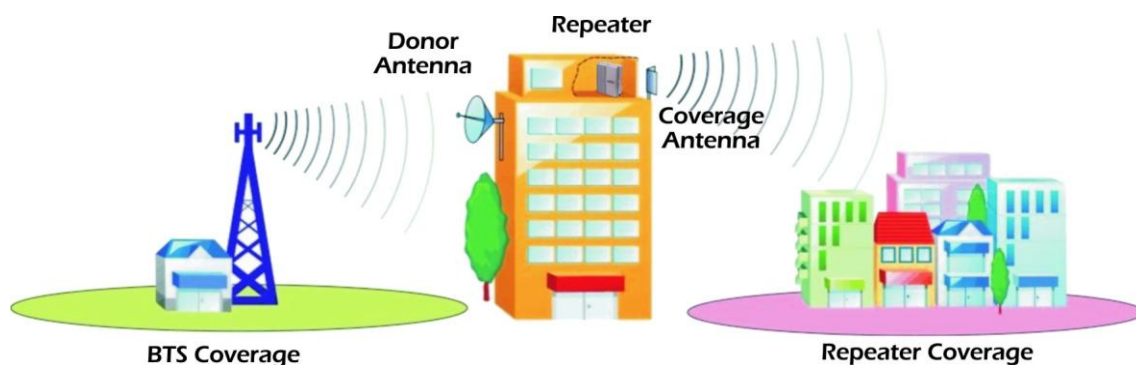
### Applications

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		NR3800(TDD)
Frequency Range	Uplink	3700~3800MHz
	Downlink	3700~3800MHz
Working Bandwidth		100MHz
Maximum Output Power	Uplink	30±2dBm
	Downlink	37±2dBm
Maximum Gain		85±3dB
Gain Adjustable Range		0~30dB/1dB Step
VSWR		≤1.5
In Band Ripple		≤±2.5dB
Spurious Emission	9kHz~1GHz: ≤ -36dBm	
	1GHz~12.75GHz: ≤ -30dBm	
EVM		≤ 4.5%
Noise Figure		≤ 5dB
Maximum Input Power(Non-Destructive)		0dBm
Group Delay		≤ 5μs
I/O Impedance		50Ω
RF Connector		N Female(One BTS Port, One MS Port)
Operation Temperature Range		-25°C ~ + 55°C
Relative Humidity Range		≤ 95% (Non Condensing)
Power Supply		AC 220V, 50/60Hz
Application		Indoor or Outdoor(IP65)
Dimensions		428*328*175mm
Weight		≤15kg
Local Control		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;