

Tri Band RF Repeater



OVERVIEW

ATNJ RF repeater with industrial design, combines two mobile network signals together and improves the mobile voice and data communication, aiming to provide a more cost-effective solution for a big coverage. ATNJ RF repeater is easy to install and maintain, which could help signal providers get fast return.

A 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 re-transmits it via the Indoor Signal Distribution System to the weak/blind coverage area. And the mobile signal is also amplified and re-transmitted to the BTS via the opposite direction.

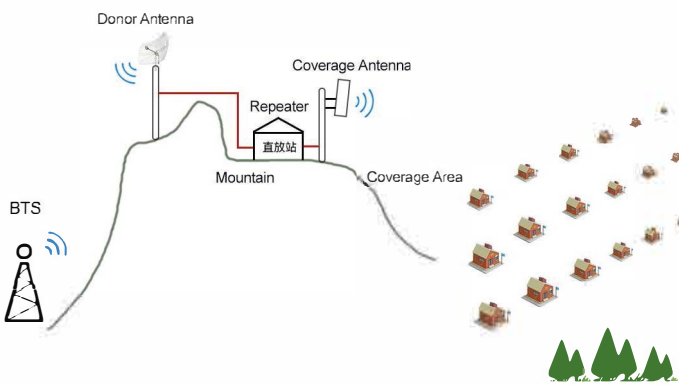
FEATURES

- Digital model with adjustable frequency, range 0.2-20MHz for each sub-band
- Each Band supports 2 maximum sub-bands
- OLED screen displays the repeater functions intuitively
- Lower power consumption, lower interference
- Auto isolation detection
- Auto gain control
- Auto level control, limit the output power to ensure stable coverage.
- Manual gain control, attenuate the gain among 1-31dB range with 1dB each step
- Auto uplink noise reduction
- Control Repeater by WIFI/USB/WAN/SIM Card (Optional)

WHERE TO USE

- Indoor: Hotels, Exhibition Centers, Basement, Parking Lots, Shopping Malls, Apartments..
- Outdoor: Airport, Tunnel, Village, Mining Area, Court, Tourism Area..

APPLICATION SCENE



Technical Specifications

SPECIFICATIONS		PARAMETERS	
Frequency Range		900/1800/2100MHz	890-915/935-960MHz 1710-1785/1805-1880MHz 1920-1980/2110-2170MHz
Gain		Uplink 85±3dB	Downlink 90±3dB
Automatic gain control (Step Attenuation)		31dB @ 1dB/Step	
MGC (Step Attenuation)		31dB @ 1dB/Step	
Auto Gain Control		31dB Min	
Output Power		Uplink 30±2dBm Downlink 37±3dBm	
Spurious Emission		9kHz~1GHz: ≤-36dBm 1GHz~12.75GHz: ≤-30dBm	
Inter-modulation Products (GSM)		≤-42dBc	
ACRR		Uplink ≥ 36 dB (5M /10M) Downlink ≥ 42 dB (5M /10M)	
VSWR		≤1.5	
Ripple	GSM	≤3dB	
	UMTS	≤2dB/3.84MHz	
	L1 800	≤3 dB @ BW _{config}	
I/O Impedance		50 Ω	
Noise Figure		≤ 8dB	
System Delay		≤ 1μs	
EVM	UMTS	≤ 8%	
	L1 800	≤ 12.5%	
PCDE		≤ -35dB	
RF Connector(Customers to Choose)		N-Type (Female)	
Operating Temperature		- 10°C ~ + 55°C	
Power Supply		100~265V AC	
Power Consumption		≤200W	
Environment Conditions		IP56	
Humidity		< 90%	
Weight		18 KG	