



## High Power 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 provider 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.

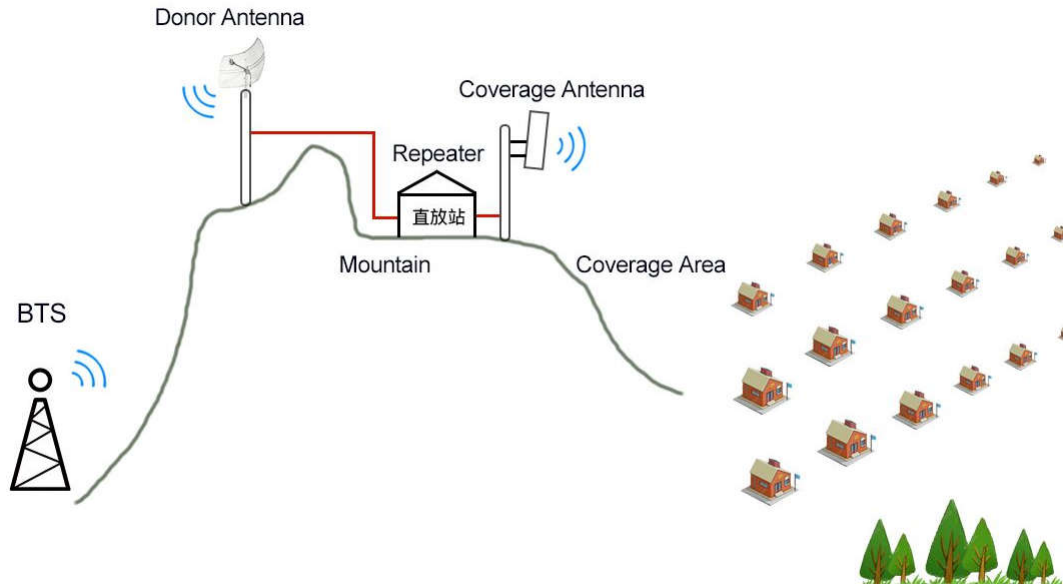
### FEATURES

- Center frequency of each sub-band is adjustable in band, 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



SPECIFICATIONS		PARAMETERS	
Frequency Range	WCDMA 2100	1920-1980MHz/2110-2170MHz	
Gain		90 ±2dBm	
MGC (Step Attenuation)		31dB @1dB/ Step	
Auto Gain Control		31dB Min	
Output Power		Uplink 27 ± 2dBm	
		Downlink 37 ± 2dBm	
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	
	L800	≤ 3dB@BW	
I/O Impedance		50Ω	
Noise Figure		≤ 8dB	

System Delay		$\leq 1\mu\text{s}$
EVM	UMTS	$\leq 8\%$
	LTE800	$\leq 12.5\%$
PCDE		$\leq -35\text{dB}$
RF Connector(Customers to Choose)		N-Type (Female)
Operating Temperature		$-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$
Power Supply		100~265V AC
Power Consumption		$\leq 200\text{W}$
Environment Conditions		IP56
Humidity		$\leq 90\%$
Weight		$\leq 18\text{kg}$