



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 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.

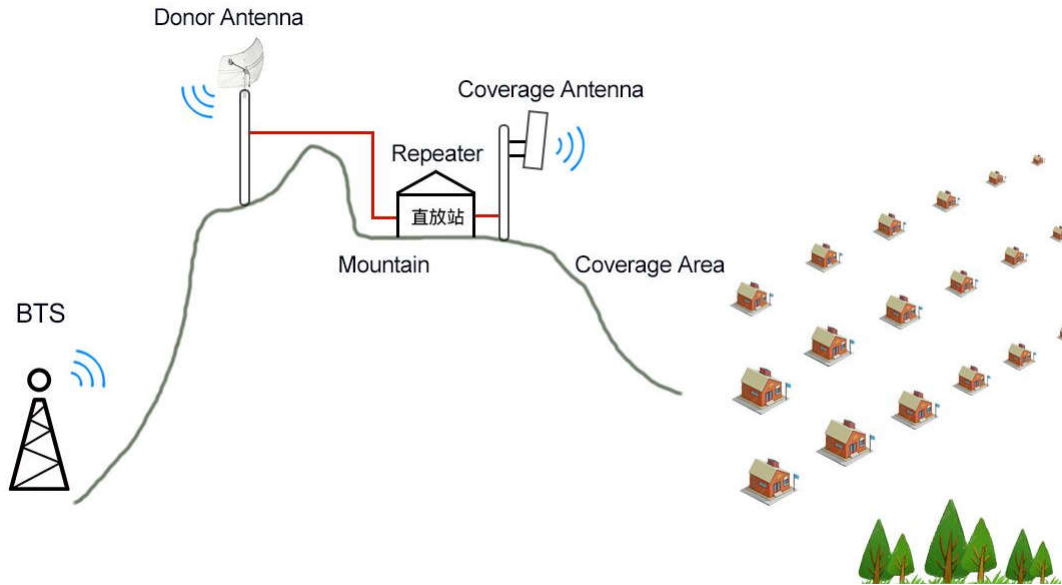
FEATURES

- 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	850/1700/1900MHz	824-849MHz/869-894MHz 1710-1755MHz/2110-2155MHz 185-1910MHz/1930-1990MHz
Gain		90 ±2dBm
MGC (Step Attenuation)		31dB @1dB/ Step
Auto Gain Control		31dB Min
Output Power		Uplink 27 ± 3dBm Downlink 27 ± 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

	L800	$\leq 3\text{dB@BW}$
	I/O Impedance	50 Ω
	Noise Figure	$\leq 8\text{dB}$
	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 $\sim 265\text{V AC}$
	Power Consumption	$\leq 200\text{W}$
	Environment Conditions	IP56
	Humidity	$\leq 90\%$
	Weight	$\leq 18\text{kg}$