

# **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

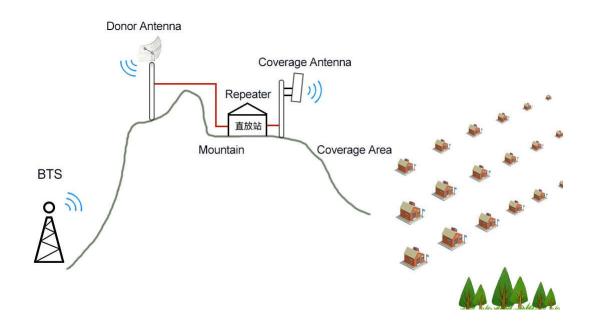
Control Repeater by WIFI/USB/WAN/SIM Card (Optional)

### 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		850/1800/2100MHz	824-849MHz/869-894MHz 1710-1785MHz/1805-1880MHz 1920-1980/2110-2170MHz
Gain		90 ±2dBm	
MGC (Step Attenuation)		31dB @1dB/ Step	
Auto Gain Control		31dB Min	
Output Power		Uplink 27 $\pm$ 3dBm	
		Downlink 27 $\pm$ 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	≤ 3dB@BW
	I/0 Impedance	50Ω
	Noise Figure	≤8dB
System Delay		≤ 1µs
EVM	UMTS	≤ 8%
EVIVI	LTE800	≤ 12.5%
	PCDE	≤ -35dB
	RF Connector(Customers to Choose)	N-Type (Female)
	Operating Temperature	-10℃~+55℃
	Power Supply	100∼265V AC
	Power Consumption	≤200W
	<b>Environment Conditions</b>	IP56
Humidity		≤90%
Weight		≤18kg