

### Tri Band 850+1700+1900MHz RF Repeater



#### **OVERVIEW**

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

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**

- · Improve any two mobile networks at the same time
- LCD display the input/output signal strength
- · Auto isolation detect function
- · Auto gain control
- · Auto level control
- Auto uplink noise reduction, avoid disturbing to BTS
- · Smart LCD to guide the installation
- · Golden color metal industrial design

#### 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 Specification**

SPECIFICATIONS		PARAMETERS	
Frequency Range		CDMA 850	824-849MHz/869-894MHz
		LTE 1800	1710-1785MHz/1805-1880MHz
		WCDMA 2100	1920-1980MHz/2110-2170MHz
Band Width		CDMA 850	25MHz
		AWS 1700	45MHz
		PCS 1900	60MHz
Gain		68±3dB	
Automatic Gain Control		31dB	
MGC (Step Attenuation)		20dB@ 1dB/Step	
Output Power		$17\pm3$ dBm	
Spurious Emission	9 kHz -150	≤-36dBm	
	kHz/1kHz		
	150 kHz - 30	≤-36dBm	
	MHz/10kHz		
	30 MHz - 1	≤-36dBm	
	GHz/100kHz		
	1 GHz- 12.75	≤-30dBm	
	GHz/1MHz		
ACPR		Uplink Fully comply with 3GPP 36.106	
		Downlink Fully comply with 3GPP 36.106	
Unwanted emissions		Fully comply with 3GPP 36.106	
VSWR		≤2	
Ripple	LTE 800	≤6dB	
	GSM 900	≤6dB	
	LTE 2600	≤6dB	
Noise Figure		≤8dB	
Delay		≤1 µ s	

I/O Impedance	50Q	
RF Connector	N-Type (Female)	
Operating Temperature	-25°~+55°	
Power Supply	DC 24V	
Power consumption	≤75W	
Environment Conditions	IP43	
Humidity	≤90%	
Weight	4kg	
Size	274*265*58mm	