



## Powerful Tri Band 850+1800+2100MHz 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                     |
|                        |                        | LTE 1800                               | 75MHz                     |
|                        |                        | WCDMA 2100                             | 60MHz                     |
| Gain                   |                        | 75 ± 3dB                               |                           |
| Automatic Gain Control |                        | 31dB                                   |                           |
| MGC (Step Attenuation) |                        | 31dB@ 1dB/Step                         |                           |
| Output Power           |                        | 24 ± 3dBm                              |                           |
| Spurious Emission      | 9 kHz -150 kHz/1kHz    | ≤-36dBm                                |                           |
|                        | 150 kHz - 30 MHz/10kHz | ≤-36dBm                                |                           |
|                        | 30 MHz - 1 GHz/100kHz  | ≤-36dBm                                |                           |
|                        | 1 GHz- 12.75 GHz/1MHz  | ≤-30dBm                                |                           |
| 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                 | 6.5kg           |
| Size                   | 320*267*58mm    |