

Dual Band EGSM900+2100MHz RF Repeater

# DUAL BAND 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        |              | EGSM 900                               | 880-915MHz/925-960MHz     |
|                        |              | WCDMA 2100                             | 1920-1980MHz/2110-2170MHz |
| Band Width             |              | EGSM 900                               | 35MHz                     |
|                        |              | WCDMA 2100                             | 60MHz                     |
| Gain                   |              | 70±3dB                                 |                           |
| Automatic Gain Control |              | 31dB                                   |                           |
| MGC (Step Attenuation) |              | 20dB@ 1dB/Step                         |                           |
| Output Power           |              | 20±2dB                                 |                           |
| Spurious<br>Emission   | 9 kHz -150   | ≤-36dBm @1kHz                          |                           |
|                        | kHz/1kHz     |  |                           |
|                        | 150 kHz - 30 | ≤-36dBm@10kHz                          |                           |
|                        | MHz/10kHz    |  |                           |
|                        | 30 MHz - 1   | ≤-36dBm@100kHz                         |                           |
|                        | GHz/100kHz   |  |                           |
|                        | 1 GHz- 12.75 | ≤-30dBm@1kHz                           |                           |
|                        | 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                 |              | ≤5dB                                   |                           |
| Noise Figure           |              | ≤9dB                                   |                           |
| Delay                  |              | ≪3 μ s                                 |                           |
| I/O Impedance          |              | 50 Ω                                   |                           |
| RF Connector           |              | N-Type (Female)                        |                           |
| Operating Temperature  |              | -25°~+55°                              |                           |
| Power Supply           |              | DC 5V2A                                |                           |

| Power consumption      | ≤15W         |
|------------------------|--------------|
| Environment Conditions | IP43         |
| Humidity               | ≪90%         |
| Weight                 | 1.1kg        |
| Size                   | 195×140×40mm |