

#### Single Band PCS 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.

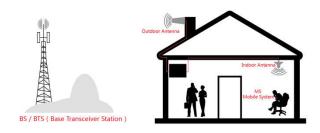
### **FEATURES**

- · Improve any 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        |              | 1850-1910/1930-1990MHz                 |
| Band Width             |              | 60MHz                                  |
| Gain                   |              | 68±2dB                                 |
| Automatic Gain Control |              | 31dB                                   |
| MGC (Step Attenuation) |              | 20dB@ 1dB/Step                         |
| Output Power           |              | 17±3dBm                                |
| Spurious<br>Emission   | 9 kHz -150   | <i>≤-</i> 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   |
|                        | AGEN         | Downlink Fully comply with 3GPP 36.106 |
| Unwanted emissions     |              | Fully comply with 3GPP 36.106          |
| VSWR                   |              | ≤2                                     |
| Ripple                 |              | ≪5dB                                   |
| Noise Figure           |              | ≪5dB                                   |
| Delay                  |              | ≪3 μ s                                 |
| I/O Impedance          |              | 50Q                                    |
| RF Connector           |              | SMA-Type (Female)                      |
| Operating Temperature  |              | -25°~+55°                              |
| Power Supply           |              | DC 5V2A                                |
| Power consumption      |              | ≤15W                                   |
| Environment Conditions |              | IP43                                   |

| Humidity | ≪90%         |
|----------|--------------|
| Weight   | 0.35kg       |
| Size     | 165X115X35mm |