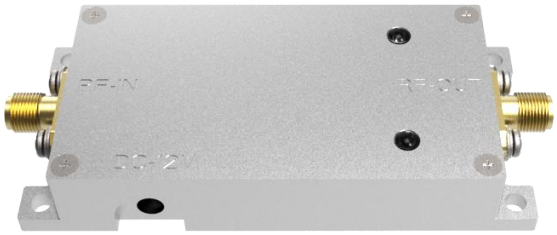
Product Introduction



This product is specifically developed for the ISM band, primarily designed for applications within the 433MHz-915MHz frequency range that require exceptional signal transmission distance and connection stability. It is suitable for wireless data acquisition systems, LoRa products, and low-power wireless devices operating within the 300MHz-1000MHz frequency range. The bidirectional amplification module can significantly enhance transmission distance.

Product Features

Transmission gain of 20dB, improving product transmission power and extending transmission range.

Noise figure of 2dB, enhancing product reception sensitivity and extending reception range.

Transmission power of 2000mW, increasing product coverage area.

Ultra-wide power supply voltage input range of 6~16V, facilitating engineering network deployment.

Compatible with any 300-1000MHz frequency band, expanding coverage for TDD mode products.

Plug-and-play, no software configuration required.

Full metal casing, improving heat dissipation performance.

Application Fields

- Operating frequency bands: 433MHz/580MHz/868MHz/915MHz, etc.
- Operating voltage: 6~16V
- Reception gain: 18dB±1
- Transmission gain: 20dB±1 (customizable)
- Input power range: Minimum 3dBm; Maximum 20dBm
- Maximum output power (P1dB): 32dBm (2W)
- Noise figure: <2dB
- TX/RX switching delay: <1μs

- LED indicator status: Transmission—green; Reception—red; Switching—orange-yellow (composite of green and red).

- Operating temperature: -40℃ to +70℃
- Operating humidity: <95%RH
- Dimensions: 76.5mm×34.5mm×13mm
- Net weight: 0.25kg

Installation Steps

1. Disconnect the power supply of the wireless AP/Router.

2. Remove the antenna from the wireless AP/Router.

3. Connect the bidirectional amplifier's RFIN port to the wireless AP/Router's antenna using the included RG316 feeder cable.

4. Attach the antenna to the bidirectional amplifier's RFOUT port.

5. Power on the bidirectional amplifier first, then the wireless AP/Router.

Product Structure Dimensions