EP-AB011

5.8GHz 802.11b/g/n Bidirectional Power Amplifier



Product Introduction

This product is a bidirectional power amplifier developed specifically for the 5.8GHz band and compliant with the IEEE 802.11b/g/n standard. It is compatible with spread and modulation techniques such as Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM). Adopting Time Division Duplex (TDD) fast microwave detection technology and linear amplifier technology, it significantly extends the wireless RF communication range while maintaining the transmission rate of 802.11b/g/n wireless devices.

Features

- Transmit gain of 20dB, which boosts transmit power by 100 times and greatly extends the transmit range.
- Noise figure of 3.0dB, which improves the product's receive sensitivity and greatly extends the receive range.
- Transmit power of 5000mW, which greatly increases the product's coverage area.
- Ultra-wide power supply input range of 6–16V, greatly facilitating engineering network deployment.
- Can extend the coverage of any 5.8GHz-band product operating in TDD mode.
- Plug and play, with no software configuration required.
- Full metal enclosure, which greatly improves heat dissipation performance.

Technical Specifications

- Operating frequency band: 5.725–5.85GHz
- Operating voltage: 6–16V
- Receive gain: 15dB ±1
- Transmit gain: 20dB ±1
- Input power range: min. 0dBm; max. 10dBm
- Maximum output power (P1dB): 37dBm (5W)
- EVM: 3% @29dBm, 802.11g 54Mbps OFDM 64QAM, BW 20MHz
- DC power consumption: 700mA @Pout 29dBm, 12V
- Noise figure: <3.0dB
- TX/RX switching delay: <1μs
- LED indicator status: transmit — green; receive — red
- Operating temperature: −40°C to +70°C
- Operating humidity: <95% RH
- Dimensions: 82mm × 50mm × 21mm
- Net weight: 0.25kg

Installation Steps

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

Step 2: Remove the antenna of the wireless AP/Router.

Step 3: Connect the RF IN port of the bidirectional amplifier to the antenna port of the wireless AP/Router using the supplied RG316 feeder cable.

Step 4: Screw the antenna onto the RF OUT port of the bidirectional amplifier.

Step 5: Power on the bidirectional amplifier first, and then power on the wireless AP/Router.

