900–930MHz RF Signal Amplifier

Model ： EP-AB076

EP-AB076 is a high-performance RF power amplifier designed for long-range wireless communication and sub-GHz transmission systems. Featuring low-noise design, high linearity amplification, and fast TX/RX switching technology, the amplifier significantly enhances signal strength, transmission distance, and communication reliability in complex environments.

The device supports plug-and-play operation and is suitable for telemetry systems, industrial wireless communication, long-range data transmission, and sub-GHz networking applications.

Key Features

- Maximum output power up to 43dBm (20W)
- Ultra-low noise figure ≤3.0dB
- High TX/RX gain for long-range transmission
- Fast TX/RX switching time ≤1μs
- Plug-and-play operation
- Aluminum alloy enclosure with excellent heat dissipation
- Suitable for outdoor and industrial environments

Technical Specifications

No.	Item	Specification
1	Frequency Range	900–930 MHz
2	Operating Voltage	24V DC
3	RX Gain	18 dB
4	TX Gain	18 dB
5	Input Trigger Power	5–25 dBm
6	Maximum Output Power (P1dB)	43 dBm (20W)
7	EVM	≤5% @ 37dBm, 802.11g, 54Mbps OFDM 64QAM BW 20MHz
8	Operating Current	900mA @ Pout 37dBm, 24V
9	Noise Figure	≤3.0 dB
10	TX/RX Switch Time Delay	≤1 μs
11	Operating Temperature	-20℃ ~ +60℃

12	RF Connector	SMA external thread internal hole
13	Power Interface	DC 6.0 × 2.0 mm
14	Housing Material	Brushed nickel-plated aluminum alloy
15	Dimensions	118 × 59 × 17.5 mm
16	Net Weight	215 g

Applications

- Long-range wireless communication systems
- 915MHz telemetry systems
- Industrial wireless transmission systems
- Sub-GHz wireless networking applications
- Remote monitoring and data transmission

Installation Guidelines

1. Connect antennas before powering on the amplifier
2. Connect the DC power supply
3. Connect the RF signal source/device
4. Ensure adequate heat dissipation during long-time operation

Important Notes

- Do not operate without antennas connected
- Recommended to use additional cooling methods
- Keep input power within the specified range
- Use stable DC power supply for optimal performance

Mechanical Dimensions

Product Size: 118 × 59 × 17.5 mm

Net Weight: 215 g

RF Interface: SMA Female

Housing Material: Aluminum Alloy