

2.4GHz 10W Signal Booster Product Specification Sheet

EP-AB073

1. Product Description

This product is a 2.4GHz 10W bidirectional power amplifier (one transmitting channel and one receiving channel), specifically developed for 2.4GHz wireless data and video transmission applications.

It utilizes advanced single-carrier modulation technology to significantly extend wireless communication distance while maintaining transmission rate, and offers strong anti-interference capability.

The product features a compact size, high efficiency, excellent linearity, and reliable stability, making it widely applicable in emergency communications, wireless security, and power systems.



2. Applications

- Smart Home System Signal Extension
- Wireless Camera Range Extension
- Industrial and Emergency Communication Enhancement

3. Features

- Up to 10W high output power, enhancing signal coverage and link stability
- Ultra-low noise figure (<2.5 dB) ensures superior signal reception performance
- Wide 12V - 24V DC operating range, adaptable to various power environments
- Plug-and-play design, no software configuration required
- Durable aluminum alloy enclosure, providing superior heat dissipation and protection
- Compact and lightweight, suitable for embedded and mobile applications

Parameters

Number	Items	Specifications
1	Frequency Range	2400-2500MHz
2	Operating Voltage	12-24V
3	Receiving Gain	18dB ± 1
4	Transmission Gain	20dB ± 1
5	Max Output Power(P1dB)	40dBm(10W)

6	Input Trigger Power	Min:4dBm Max:20dBm
7	Linear Output Power	34dBm, EVM \leq 5% (802.11g 54 Mbps, 64QAM, BW 20 MHz)
8	Noise Figure	<2.5dB
9	Current Supply	750mA@Pout 34dBm 12V
10	TX/RX Switch Time Delay	<1 us
11	LED Indicator	Red (Power/Status)
12	Operating Temperature	-40°C ~+70°C
13	Storage Temperature	-40°C ~+125°C
14	Operating Humidity	\leq 95% RH (non-condensing)
15	RF Connector	Input: SMA-K; Output: RPSMA-K
16	Power Socket	\varnothing 2.5*0.7mm
17	Dimensions (L×W×H)	73*43*15(mm)
18	Housing Material	Aluminum
19	Net Weight	0.085kg