

2.4GHz 6W Signal Booster Product Specification Sheet

EP-AB065

1. Product Description

This product is a 2.4GHz 6W bidirectional power amplifier (one transmitting and one receiving channel) specifically designed for 2.4GHz wireless data and video transmission applications.

Utilizing advanced single-carrier modulation technology, it significantly extends the wireless communication distance while maintaining the original data transmission rate of wireless devices and providing strong anti-interference capability.

Featuring compact size, high efficiency, excellent linearity, and stable reliability, this booster is widely used in emergency communications, wireless security systems, smart home networks, and industrial power systems.



2. Applications

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

3. Features

- Up to 6W high-power output, enhancing signal coverage and link stability of certified wireless devices
- Ultra-low noise figure (<2.5 dB) for improved signal clarity
- Wide 12V - 24V DC input range, adaptable to multiple power environments
- Plug-and-play design, no software configuration required
- Compact aluminum housing, ensuring excellent heat dissipation and durability
- Compatible with 2.4GHz Wi-Fi and video transmission systems

Parameters

Number	Items	Specifications
1	Frequency Range	2400-2500MHz
2	Operating Voltage	12-24V
3	Receiving Gain	17dB \pm 1
4	Transmission Gain	21dB \pm 1

5	Max Output Power(P1dB)	38dBm(6W)
6	Input Trigger Power	Min:4dBm Max:17dBm
7	Linear Output Power	32dBm, EVM \leq 5% (802.11g 54 Mbps, 64QAM, BW 20 MHz)
8	Noise Figure	<2.5dB
9	Current Supply	400mA@Pout 32dBm 12V
10	TX/RX Switch Time Delay	< 1 us
11	LED Indicator	Red
12	Operating Temperature	-40℃ \sim +70℃
13	Storage Temperature	-40℃ \sim +125℃
14	Operating Humidity	Up to 95% rel. humidity
15	RF Connector	Input: SMA-K; Output: RPSMA-K
16	Power Socket	Ø2.5*0.7mm
17	Dimensions (L×W×H)	73*43*15(mm)
18	Housing Material	Aluminum
19	Net Weight	0.085kg