

5.8GHz 8W Signal Booster Product Specification Sheet

EP-AB068

1. Product Description

This product is a 5.8GHz 8W bidirectional power amplifier (one transmitting and one receiving channel) specially designed for wireless video transmission applications.

It utilizes advanced single-carrier modulation technology to significantly extend wireless communication distance without affecting transmission rate, while providing strong anti-interference capability.

Featuring compact size, high efficiency, excellent linearity, and stable performance, it is widely used in wireless surveillance systems, smart home networks, and emergency communication equipment.



2. Applications

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

3. Features

- Up to 8W high output power, extending signal coverage and improving link stability
- Low noise figure (<3.0 dB) ensures clear signal reception
- 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	5700 - 5900MHz
2	Operating Voltage	12-24V
3	Receiving Gain	15dB \pm 1
4	Transmission Gain	18dB \pm 1
5	Max Output Power(P1dB)	39dBm(8W)

6	Input Trigger Power	Min:4dBm Max:21dBm
7	Linear Output Power	31dBm, EVM \leq 5% (802.11g 54Mbps, 64QAM, BW 20MHz)
8	Noise Figure	<3.0dB
9	Current Supply	750 mA @ Pout 31dBm, 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	Ø2.5*0.7mm
17	Dimensions (L×W×H)	73*43*15(mm)
18	Housing Material	Aluminum
19	Net Weight	0.085kg