

1.4GHz 7W Signal Booster Product Specification Sheet

EP-AB067

1. Product Description

This product is a 1.4GHz 7W bidirectional power amplifier (one transmitting channel and one receiving channel), specifically designed for 1.4GHz wireless data and video transmission applications.

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

Featuring compact size, high efficiency, excellent linearity, and stable performance, it is widely used in emergency communications, wireless security systems, and power networks.



2. Applications

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

3. Key Features

- Up to 7W high-power output, enhancing signal coverage and link stability
- Ultra-low noise figure (≤ 1.5 dB) for superior signal quality
- Wide 12 V - 24 V DC operating range, compatible with various power environments
- Plug-and-play design, no software configuration required
- Compact and durable aluminum housing, providing heat dissipation and protection
- Suitable for embedded and mobile applications

3. Electrical Characteristics

Number	Items	Specifications
1	Frequency Range	1420-1470MHz
2	Operating Voltage	12-24V
3	Receiving Gain	18dB \pm 1
4	Transmission Gain	20dB \pm 1
5	Max Output Power(P1dB)	38.5dBm(7W)
6	Input Trigger Power	Min:4dBm Max:19dBm

7	Linear Output Power	32dBm, EVM \leq 5% (802.11g 54 Mbps, 64QAM, BW 20 MHz)
8	Noise Figure	<1.5dB
9	Current Supply	400mA@Pout 32dBm 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	5% - 95% RH (non-condensing)
15	RF Connector	Input: SMA-K; Output: RP-SMA-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