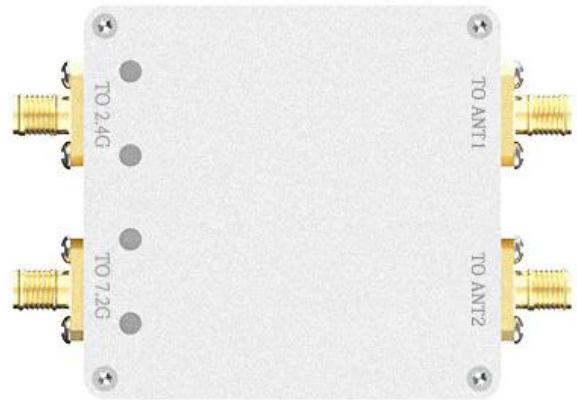


2.4GHz+7.2GHz Dual Channel Extender EP-AB089

Product Overview

This dual-channel RF signal extender is engineered for long-range, high-stability wireless communication. It operates on both 2.4GHz and 6–7.2GHz frequency bands, making it ideal for next-generation wireless systems, including WiFi 6E and WiFi 7.

With high output power up to 36dBm (4W) and an ultra-low noise design, the device significantly enhances signal coverage, transmission stability, and link reliability, even in demanding environments.



Applications

6 – 7GHz Wireless Communication

- ◆ Compatible with WiFi 6E / WiFi 7 systems
- ◆ Enhances telemetry, control signals, and data transmission

Mobile & Outdoor Deployment

- ◆ Vehicle / RV-mounted communication systems
- ◆ Temporary wireless network setups
- ◆ Field operations and off-grid environments

Key Features

- Dual-band design: 2.4GHz + 7.2GHz independent channels
 - High output power up to 36dBm (4W)
 - Ultra-low noise figure (as low as 2.5dB)
 - Fast TX/RX automatic switching (<1μs)
 - Plug-and-play operation, no software required
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- Wide voltage input range (7–36V)
- Aluminum enclosure for enhanced heat dissipation

2.4GHz Channel Parameters

Number	Items	Specifications
1	Frequency Range	2400-2500MHz
2	Operating Voltage	7-36V
3	Receiving Gain	19dB ± 1
4	Transmission Gain:	17dB ± 1
5	Max Output Power(P1dB)	36dBm(4W)
6	Input Trigger Power	Min:3dBm Max:23dBm
7	EVM	3%@28dBm 802.11g 54Mbps OFDM 64QAM BW 20MHz
8	Noise Figure	<2.5dB
9	Current Supply	580mA@Pout 28dBm 12V
10	TX/RX Switch Time Delay	<1 us
11	LED Indicator	Transmitter: Green; Receiver: red
12	Operating Temperature	-30°C ~+70°C
13	Storage Temperature	-40°C ~+150°C
14	Operating Humidity	Up to 95% rel. humidity
15	RF Connector	Input: SMA-K; Output: RP-SMA-K

7.2GHz Channel Parameters

Number	Items	Specifications
1	Frequency Range	6000-7200MHz
2	Operating Voltage	7-36V
3	Receiving Gain	14dB ± 1
4	Transmission Gain:	20dB ± 1
5	Max Output Power(P1dB)	36dBm(4W)
6	Input Trigger Power	Min:3dBm Max:20dBm
7	EVM	3%@28dBm WIFI7 54Mbps OFDM 64QAM BW 20MHz
8	Noise Figure	<2.5dB
9	Current Supply	485mA@Pout 28dBm 12V
10	TX/RX Switch Time Delay	<1 us
11	LED Indicator	Transmitter: Green; Receiver: red
12	Operating Temperature	-30°C ~+70°C
13	Storage Temperature	-40°C ~+150°C
14	Operating Humidity	Up to 95% rel. humidity
15	RF Connector	Input: SMA-K; Output: RP-SMA-K

16	Power Socket	2.5*0.7mm DC(default)
17	Shell Size	65*61*12(mm)
18	Shell Material	Aluminum
19	Net Weight	0.12Kg

Installation & Usage Notes

1. Recommended power supply: 12V / 4A
 2. Ensure proper heat dissipation (heatsink or cooling fan recommended)
 3. Connect the antenna before powering on the device
 4. Maximum output power (36dBm) is achieved when input power is 18–19dBm
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