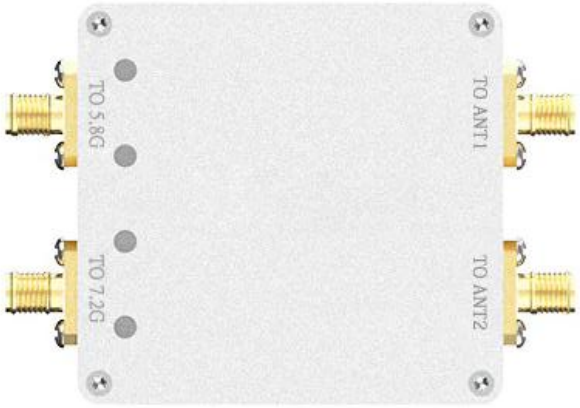
5.8GHz+7.2GHz Dual Channel Extender
EP-AB090

Product Overview



This dual-channel RF signal extender is designed for long-range and high-stability wireless communication. It supports both 5.8GHz and 6–7.2GHz frequency bands, making it ideal for next-generation wireless systems such as WiFi6E / WiFi7.

With high output power up to 36dBm (4W) and ultra-low noise performance, the device significantly improves signal coverage, transmission stability, and link reliability 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: 5.8GHz + 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
- Wide voltage input range (7–36V)
- Aluminum enclosure for enhanced heat dissipation

5.8GHz Channel Parameters

Number	Items	Specifications
1	Frequency Range	5725-5850MHz
2	Operating Voltage	7-36V
3	Receiving Gain	16dB±1
4	Transmission Gain:	18dB±1
5	Max Output Power(P1dB)	36dBm(4W)
6	Input Trigger Power	Min:3dBm Max:20dBm
7	EVM	3%@28dBm 802.11a 54Mbps OFDM 64QAM BW 20MHz
8	Noise Figure	＜3.0dB
9	Current Supply	485mA@Pout 28dBm 12V
10	TX/RX Switch Time Delay	＜1 us
11	LED Indicator	Transmitter: Green; Receiver: red
12	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℃～+70℃
13	Storage Temperature	-40℃～+150℃
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