

# Superdji

## BiDiPA2458-2.5W dual band bidirectional signal booster

### Introduction

The 2.4GHz 5.8GHz dual band bidirectional signal booster with automatic switching is a highly efficient and compact unit designed to increase the performance and range of the transceiver work in the 2.4GHz and 5.8GHz ISM band. Such as WiFi, Zigbee, wireless AV transmitter, UAV Remote controller, baby monitor, wireless camera, wireless audio, wireless earphone. This product has the function of bidirectional amplification signal. Can be used with all kinds of antenna.

### Specifications

Model Number	Bidi2458mini-2.5W	RF Output Power	2.5 W
Frequency Band	2.4-2.5GHz, 5-6GHz	Max RF Input power	200mW
Cooling mode	Passive cooling	Min RF Input power	10mW
Weight	<10 g	optimum Input power	100mW
PCB Size	30*30*3.5 mm	Power Supply Voltage	5 V
Output connector	MMCX-KE, IPEX 1, IPEX 4	Power Supply current	1.2 A
input connector	MMCX-KE, IPEX 1, IPEX 4	MAX Power dissipation	≈ 6 W
2.4GHz TX Gain	12 dB	5.8GHz TX Gain	12 dB
2.4GHz RX Gain	12 dB	5.8GHz RX Gain	12 dB
RED LED	Working in 2.4G mode	BLUE LED	Working in 5.8G mode

### Quick Install Guide

STEP 1: Turn off the power supply of the transceiver, take down the antenna of the transceiver.

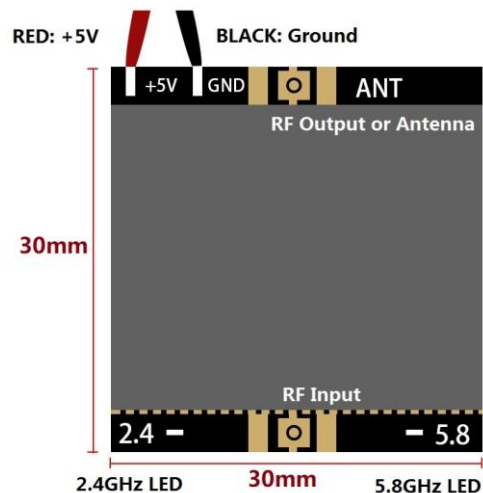
STEP 2: The booster input port connection with the output port of the transceiver.

STEP 3: Reconnect the antenna to the booster.

STEP 4: Connect the power supply. The LED lights mean the booster is working.

### ACUTION DANGER!

- Turn off the power supply before remove or replace the antenna.
- The amplifier work will be hot, please ensure good heat dissipation. the amplifier is in full contact with the material for thermal conduction. High temperature will shorten the service life
- Not lightning protection ! Not waterproof !
- Non professional modification may be damage the device !
- Please observe the local electromagnetic radiation regulations, Our company is not liable for any resulting liability.



DC Input voltage range 7-28 volts

**DC step-down**

The battery above 5V is stepped down to 5V

EN voltage 2-5 volts

connect to antenna

30mm

16mm

12.5mm

5V

Connect to motherboard

**bidirectional amplifier**

EN : Module enable control

By default, the EN function is not enabled on the step-down module, and the voltage of 5 volts will be output when the battery module is connected.

**How to open EN:**

1. Remove resistor R5
2. Find the voltage between 2-5V on the motherboard to connect the EN pad.

DC Input voltage range 3-4.9 volts

**step-up**

Boost the voltage to 5V, usually used for RC with 1S batteries.

The DC step-up module must be connected to the EN voltage to work.

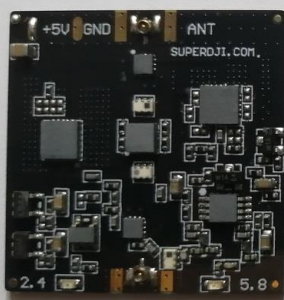
EN voltage 2-5 volts

15mm

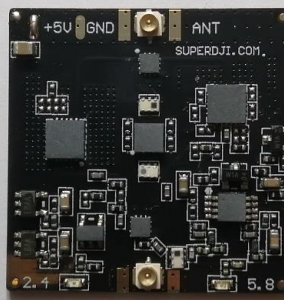
10.5mm

5V

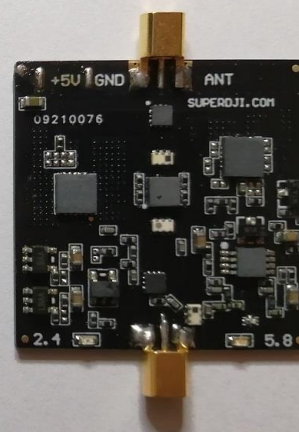
### Three Types of Connectors



IPEX4



IPEX1



MMCX