

# Superdji

## BiDiPA2458-4WX dual band bidirectional signal amplifier

### Introduction

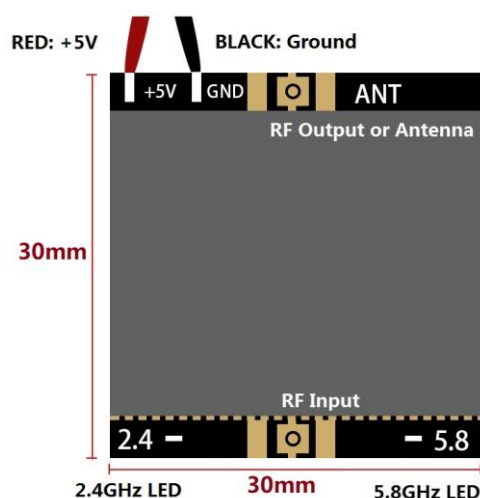
The 2.4GHz 5.8GHz dual band bidirectional signal amplifier with automatic switching is a highly efficient and compact unit designed to increase the performance and range of the transceiver work in the 2.4GHz and 5.8GHz ISM band. Such as WiFi, Zigbee, Wireless Video transmitter, Drone UAV RC, baby monitor,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

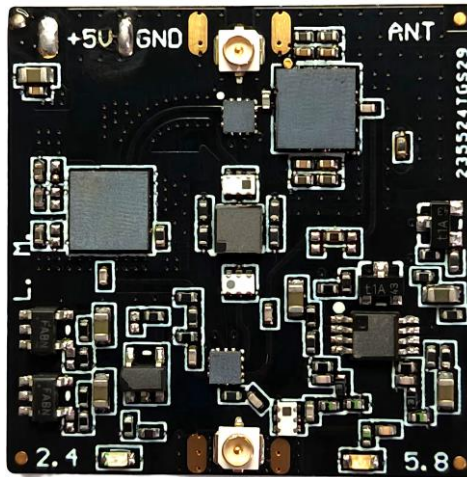
### Specifications

|   |                                  |  |                         |
|---|----------------------------------|--|-------------------------|
| Model Number                                  | BidiPA2458-4WX                   | Maximum output power   | (36dBm)4W+              |
| Frequency Band                                | 2.4-2.5GHz, 5-6GHz               | Max RF Input power   | 500mW                   |
| 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   | 5-5.5 V                 |
| Otput connector                               | MMCX-KE, IPEX 1, IPEX 4          | Input connector  | MMCX-KE, IPEX 1, IPEX 4 |
| 2.4GHz TX Gain                                | For CE:16 dB, FCC:13dB           | 5.8GHz TX Gain   | For CE:18 dB, FCC:13dB  |
| 2.4GHz RX Gain                                | 12 dB                            | 5.8GHz RX Gain   | 15 dB                   |
| RED LED                                       | Working in 2.4G mode             | BLUE LED   | Working in 5.8G mode    |
| Maximum output power options @Temperature 20℃ | 4W+<br>Powerful, Extreme choice  | power supply 5.5V 2.8A<br>DCDC efficiency 80%, Power dissipation≈20W |                         |
|   | 3.5W<br>Balance, the best choice | power supply 5.3V 2.6A<br>Total power dissipation≈17.5W              |                         |
|   | 3W<br>Low power, high stability  | power supply 5.1V 2.4A<br>Total power dissipation≈15W                |                         |

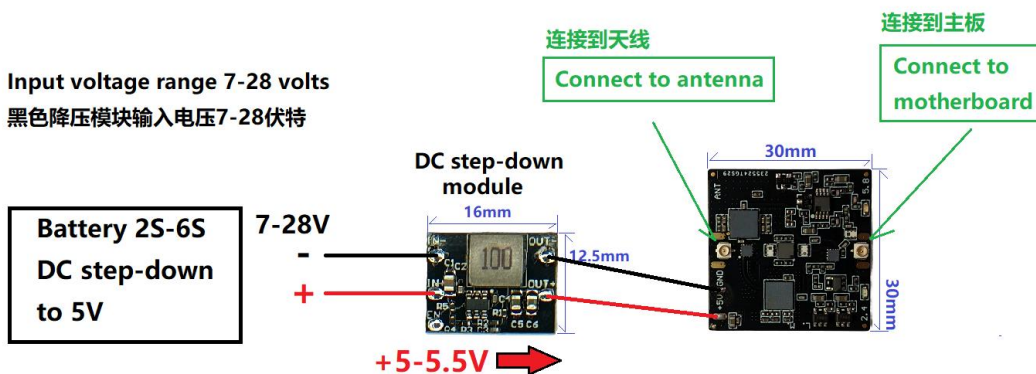
### ACUTION DANGER!

- 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.

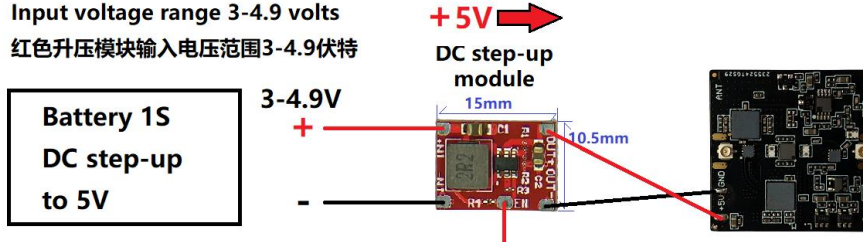




Input voltage range 7-28 volts  
黑色降压模块输入电压7-28伏特



Input voltage range 3-4.9 volts  
红色升压模块输入电压范围3-4.9伏特



EN 功能脚：模块使能控制

DC step-up模块必须连接EN控制脚才能工作。控制电压2-5V。  
在遥控器主板上寻找满足如下条件的焊盘连接：遥控器开机后电压范围是2-5V之间，例如2.5V, 3V, 3.3V, 3.7V, 4.2V。遥控器关机无电压。利用此焊盘电压控制电源模块的开启和关闭。

EN function pin: module enable control

The DC step-up module must be connected to the EN control pin to work. Control voltage 2-5V.  
Look for pad connections on the remote control motherboard that meet the following conditions: the voltage range after the remote control is turned on is between 2-5V, such as 2.5V, 3V, 3.3V, 3.7V, 4.2V. The remote control is powered off and has no voltage. Use this pad voltage to control the power module on and off.

## 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 means the booster to work.