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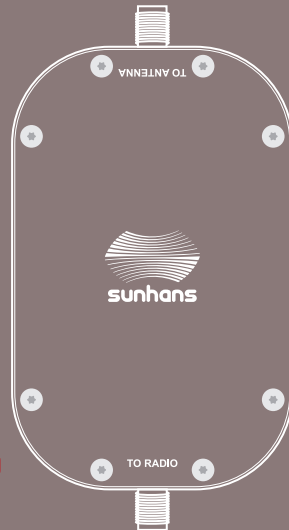
## USER MANUAL

Model Name: SHRC5824G2WP

# eSunRc

2.4GHz/5.8GHz **2W/33dBm**

# DUAL BAND WIFI SIGNAL BOOSTER

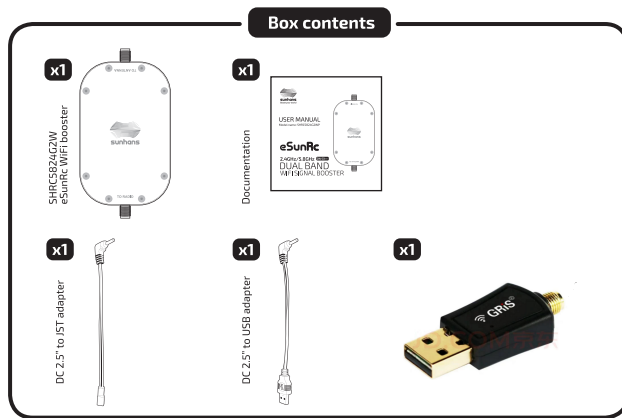


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Thank you for choosing **Sunhans**. Before using your new booster, please carefully read this quick guide.

Before using your **Sunhans** booster for the first time, please check the box contents. If some of the following items are not inside, contact the supplier where you purchased your product.



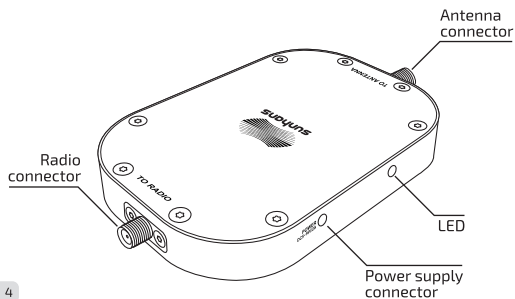
## Trademarks

The logo of Sunhans and eSunRc are registered trademarks of Sunhans Technology (HK) LIMITED.

Wi-Fi®, the Wi-Fi logo CERTIFIED and Wi-Fi logo are registered trademarks of Wi-Fi Alliance.

All other trademarks and copyrights are the property of their respective owners.

## Device Overview



## Safety warnings



Please pay attention to this guide. It is dangerous and may violate the law. The manufacturer assumes no responsibility for the user who does not comply with the following recommendations or makes improper use of the WiFi amplifier

Do not use the WiFi amplifier near fuels or chemicals. Keep the device away from children.

WiFi Boosters affect the normal operation of electronic medical devices such as pacemakers, hearing aids and other electronic medical hearing equipment.

Please do not open the WiFi amplifier yourself. If the WiFi amplifier is damaged, contact your supplier.

Keep the device dry. Rain, humidity and all types of liquids or moisture can contain minerals that corrode electronic circuits. If your device gets wet, contact the supplier.

Do not use a wet towel or detergent to clean the device.

Dispose of the product according to local regulations & please recycle when possible. Do not dispose of it as household waste

**DECLARATION** The brand Sunhans reserves the right to change the manual contents without notice.

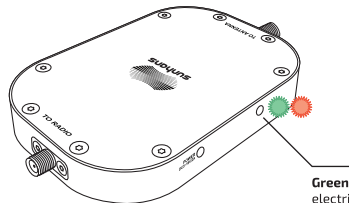
## Features & Description

Sunhans' family of Wi-Fi Signal Boosters are designed for use in mobile and/or mesh wireless networking applications. It is the most consistent signal amplification available for Wi-Fi networks. Designed for bi-directional signal amplification, in contrast, traditional analog amplifier technologies can go into saturation or reduce transmit power as input signal fluctuates, negatively impacting signal quality and network performance. While allowing for the use of virtually any 5.8/2.4GHz antenna that implements an SMA-Male connector. Also the small footprint and low profile design makes it an ideal solution for mounting on vehicles or in other space constrained applications.

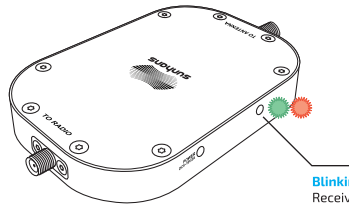
The Sunhans' 5.8/2.4GHz Dual Band Inline Signal Booster efficiently increases signal range of any antenna by up to 200%-400% while maintaining high data throughput rates. This signal boosting functionality adds up to 16dB of transmit gain and 12dB of receive gain, resulting in a farther reaching signal and better connectivity with client radios. Results may vary depending on environmental factors, interference, cable length and type, etc.

## Understanding Lights

The Sunhans WiFi booster includes one indicator light.



**Green ON** The WiFi booster receives electricity and it is working properly.



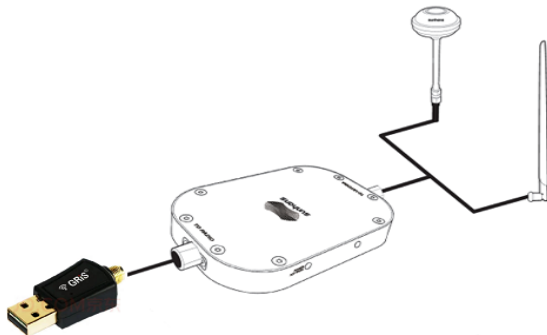
**Blinking Red** The WiFi booster is working. Receiving information from the radio, boosting that signal and sending it by the antenna.

## Connecting the booster to the radio and antenna



### WARNING

To install the booster, first we will connect the antenna to the "TO ANTENNA" connector. Then, we will connect the radio to the "TO RADIO" connector. After that, connect the power supply.

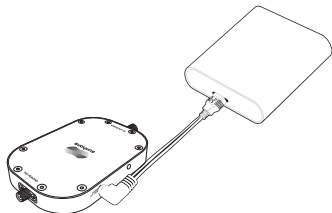


The WiFi booster indicates which connector is for antenna and which one for the radio. There are several kinds of radios that you can connect to the booster to increase the power and distance of use. For example router, access point, radio control remotes, radio control planes, drones, cars... IP camera, Walkie Talkies, etc. Always checking that the range of frequency between the radio and the booster is the same.

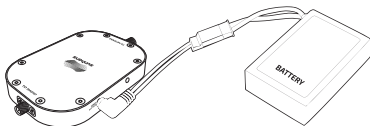
## Connecting the booster to the power supply

The WiFi booster includes 3 adapters to connect your booster to a DC battery or power bank. If you need to connect it to 220V or another type of power source, please check our website [www.sunhans.com](http://www.sunhans.com), for the right adapter, or contact with us by email [info@sunhans.com](mailto:info@sunhans.com)

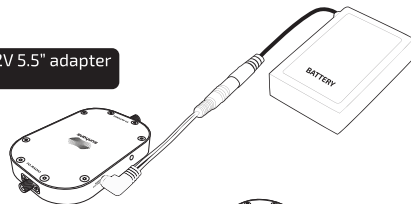
DC 2.5" to USB adapter



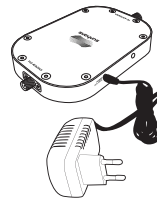
DC 2.5" to JST adapter



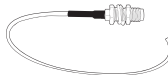
DC 2.5" to 12V 5.5" adapter  
(not included)



12V/2A DC, 100~240V for  
AC adapter (not included)



RP-SMA FEMALE TO  
IPEX Cable (not included)



RG141 30cm cable SMA  
male to RP-SMA male  
(not included)



## Technical Specifications

**Operating range:** 2.4~2.5 GHz, 5.0~5.875GHz.

**Operating mode:** Bi-directional, half-duplex, time division duplex senses RF, carrier from transmitter and automatically switch receiving to transmitting mode.

**Antenna connector type:** RP-SMA female (pin inside) 50ohm.

**Radio connector type:** SMA female (hole inside) 50ohm.

**Input power:** 0~20dBm.

**Transmit gain:** 15~18dB.

**Output power:** 2000mW (33dBm).

**Receiver gain:** ≤10dB.

**Noise figure:** ≤3.5 dB typical.

**Frequency response:** ±1dB over operating range.

**Supported voltages:** 5V~16V/2A DC.

**Operating temperature:** -20°C to +70°C.

**Operating humidity:** Up to 75% relative humidity.

**Material:** Cast aluminum.

**Booster weight:** 77g.

**Booster size:** 97x52x11mm.

## FAQ (Frequently Asked Questions)

**1. My WiFi booster's light indicator, does not blink blue. It just shows the white light. What's the problem?**

Please, check the connection between the radio (RC, router, IP camera...) and the "To Radio" connector of the WiFi booster. If the connection is right, maybe just the blue LED has a problem. So check if the level of signal increased. If you do not have any improvement in your signal strength, the blue LED does not blink and the installation was right, please, contact the supplier where you bought the product to file a warranty claim.

**2. The white light is off, but the blue light is blinking.**

The white LED is possibly broken. But the booster is working properly.

**3. The light indicator does not work. There is no light when I plug the power supply.**

Please, check if your power supply operates between 5V to 16V 2A. If it does, contact your supplier.

**4. The signal is not strong enough or it barely increased.**

Please, check the connections between the radio and the booster. Also between the booster and the antenna. Check that the blue light is blinking. If it all looks correct, relocate the booster in a higher place and orientate the antenna.

For any other problems or questions, please contact your supplier, or with Sunhans directly: [info@sunhans.com](mailto:info@sunhans.com)



#### APPENDIX: Proper disposal of the product

*(Electric and electronic waste) (Applicable in the European Union and European countries with systems of selective collection of waste). The presence of this symbol in the product, its accessories or informative material indicates that once that it's useful life has expired, neither the product nor its electric accessories must be thrown away as household waste.*

*To prevent potential damage to the environment or to human health, please separate these products from other kinds of waste and recycle them properly. Thus, you help foster the sustainable reusing of material resources. Home users can contact the establishment where they purchased the product or the corresponding local authorities to get information about how and where to take this waste for an ecologically safe recycling process. Major consumers can contact their provider and check the conditions of the purchase contract. Neither this product nor its electric accessories must be thrown away with other commercial waste.*

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.