

# WOA5300-20 Operation Instruction

Please read the instruction carefully before using the product and keep it properly

**SI SPRUCE**



# Welcome

Thank you for choosing SKSpruce out access ponint WOA5300-20.

SKSpruce WOA5300-20 is a high performance, dual-band outdoor wireless access point designed to meet rapidly rising demand for high capacity and bandwidth in outdoor applications. Compliant with IEEE 802.11a/b/g/n/ac standards and supporting MU-MIMO and 2x2 MIMO, the WOA5300-20 is capable of high throughput up to 1.267 Gbps.

The WOA5300-20 is designed with an IP68-rated enclosure, and an internal heating module for deployment in harsh environments. The WOA5300-20 also supports local or power-over-Ethernet (PoE) power options to ease installation. The WOA5300-20 delivers high performance in dense outdoor urban settings, such as transit centers, malls, corporate campuses, stadiums, as well as industrial settings like mining and oil & gas applications.

Infinity | Beyond

# FCC Statement

## General Statement

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.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

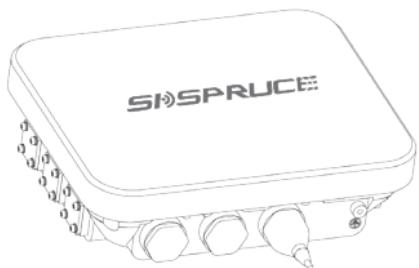
## FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This device must be installed and operated in accordance with provided instructions and the antennas used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.

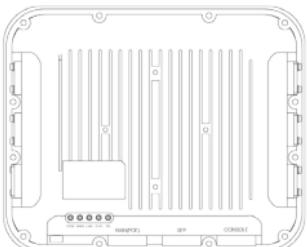
The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. This function is maintained by the main chip (IPQ4019).

# Product Introduction

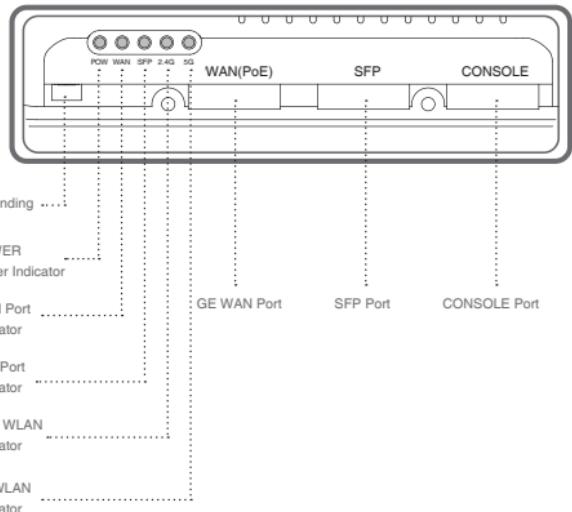
Front



Back



Port Introduction



# Specifications

Item	Description
Power input	802.3at power over Ethernet (PoE)
Overall power consumption	< 25 W
Dimensions (W x D x H)	9.41" x 7.68" x 3.35" (239 mm x 195 mm x 83 mm)
Weight	3.31 lbs (1.50 kg)
Antenna	Internal antenna 2.4G: 8 dBi gain 5G: 10 dBi gain
Operating frequency	802.11a/n/ac: 5.15–5.850 GHz 802.11b/g/n: 2.4–2.4835 GHz
Spatial streams	2x2 MIMO
Maximum SSIDs	32
Maximum concurrent users	256
Local AP functions	PPPoE client, NAT, DHCP server, DHCP client Configuration of local SSID, encryption and shared keys

Item	Description
802.11n/ac	Automatic channel scanning 20 MHz/40 MHz channel bandwidth (802.11.ac supports 80 MHz) A-MPDU, A-MSDU Dynamic power scaling Unscheduled automatic power save delivery (U-APSD)
Wi-Fi security and authentication	WEP 64/128 WPA/WPA2-PSK-TKIP WPA/WPA2-PSK-CCMP WPA/WPA2-802.1X-TKIP WPA/WPA2-802.1X-CCMP Portal, and Dot1x Authentication (EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-SIM/AKA, EAP-FAST)
Management	Network management and control: CAPWAP Supports remote upgrades through FTP Supports NTP, ftp/tftp, WEB
QoS	Supports rate-limiting based on STA/SSID Supports dynamic bandwidth property delivery

# Preparing Installation

## Tools and Environment Requirements

To ensure the outdoor AP set is in good condition for a long time, the system shall work under the specified operating environment. Avoid strong vibrations or noises and keep away from step-down transformer substations and traction substations as far as possible when installing and debugging the outdoor AP equipment. Please prepare the tools and instruments at all installation stages in advance to avoid work delay on site.

Type	Tool
General	Adjustable wrench, plier, phillips screwdriver, sleeve, steel tape, marker pen and percussion drill
Specialized	Wire stripping plier, wire clamp, waterproof mortar, waterproof tape and electrical tape
Auxiliary	Ladder

Note: the installation tools are not provided with the equipment. Please prepare installation tools according to the real environment.

Item	Requirement
Environment	<p>Operating temperature: -30°C ~65°C</p> <p>Relative humidity: 0%~95% noncondensing</p> <p>Ingress protection: IP68</p> <p>Wind speed: &lt; 250 km/h</p> <p>Away from environments that are high humidity, the gas harmful, inflammable, explosive, vulnerable to electromagnetic interference (such as large radar station, fire station and transformer substation) and voltage unstable:</p> <ul style="list-style-type: none"><li>It is not recommended to be installed close to the sea. 500m away from seaside is suggested</li><li>Avoid ponding places. It is recommended to be installed on a cement terrace or where the terrain is high</li></ul>
Site selection	
Grounding connection	Grounding cord: ≤30m

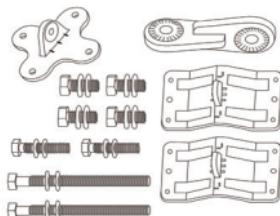
## Installation Kit

Before installing the equipment, first select the standard or custom-sized mounting kit according to the thickness of the pole. According to the different customer needs, the installation kit is divided into all-aluminum bracket kit and aluminum alloy bracket + steel band clamp kit:

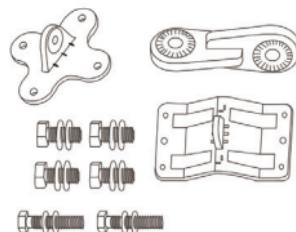
- All-aluminum bracket kit: for the pole external diameter ranging from 40 mm to 60 mm
- Aluminum alloy bracket + steel band clamp kit: for the pole external diameter ranging from 60 mm to 110 mm (the steel band clamp is not provided)

The installation kits are shown in the right figures:

All-aluminum bracket kit



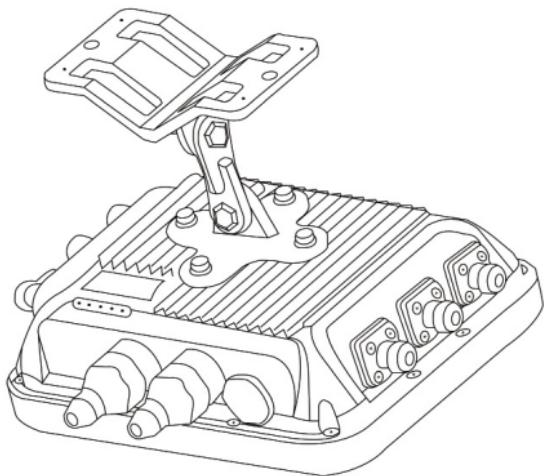
Aluminum alloy bracket + steel band clamp kit



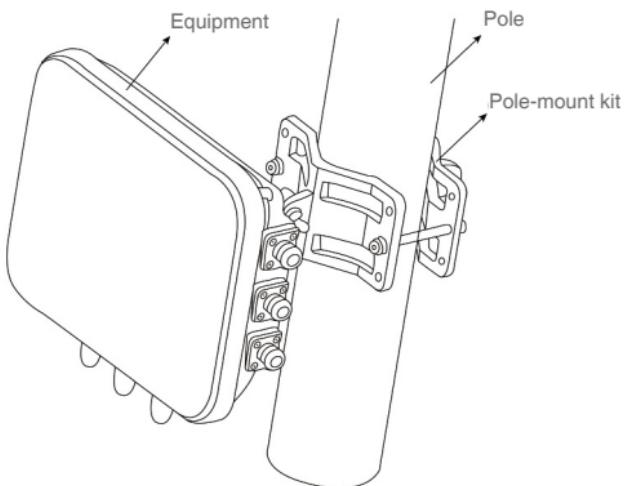
# Installing the Equipment

## Assembling Pole-mount Kit

① Before installing the equipment, assemble the kit as is shown below:

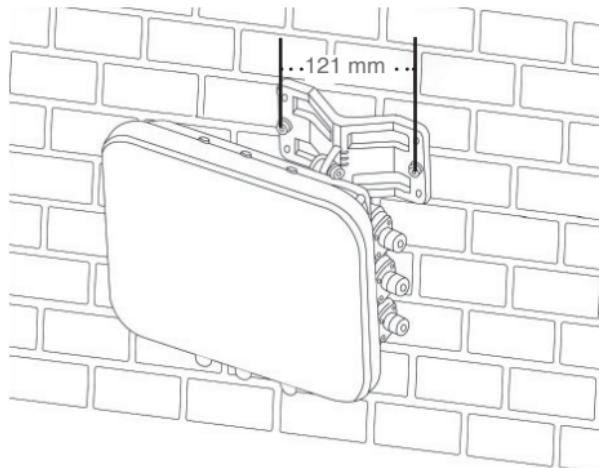


② All-aluminum bracket kit installation is as shown below:



## Wall-mount Installation

The expansion bolts will be used when installing the AP onto the wall. Please prepare the flat washers, play washers, nuts and 2 expansion bolts (M6 x 60 or M6 x 80). Draw 2 bolt hole locations with the relative distance of 121 mm in the horizontal direction.

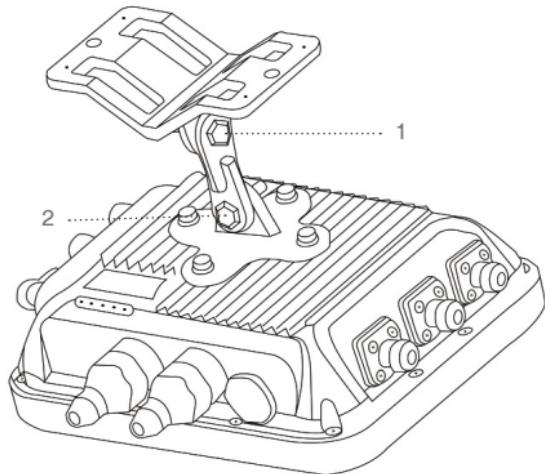


### Warning:

All ports must be waterproofed strictly in accordance with the procedures. Firstly, coat each junction with the waterproof cement; secondly coat each junction with the waterproof adhesive tape to ensure the effect.

# Debugging

If you need to adjust the angle of the equipment, you can use the wrench to adjust the 2 bolts as is shown below:



Customer Service: 4000367800  
Manufacturer: SKSpruce Technologies  
Official Website: [www.skspruce.com](http://www.skspruce.com)

# Warranty Instructions

Thank you for choosing SKSpruce Technologies products. For your interests, please read the instructions carefully.

## Hardware Support During Warranty Period

SKSpruce Technologies provides 1 year warranty services for products starting from the date of shipment. Within the warranty period, any product hardware damages under the usage of User Manual will be warranted for free. In the following cases, the free hardware replacement service is provided:

- Product damage found when unpacking inspection
- Wrong product model
- Wrong or incomplete accessories
- Products cannot be repaired under normal circumstances during warranty period

SKSpruce Technologies warranty equipment will be repaired in 30 days after the receipt of damaged hardwares and within 5 working days reply the customer the cause of the problem and possible date. SKSpruce Technologies will provide new hardware free of charge to customers if it can not be repaired within the specified time.

Hardware damage caused by any behavior that does not comply with the operating instructions will take the normal maintenance procedure and will charge the customer for maintenance and shipping.

For other products purchased by SKSpruce Technologies, SKSpruce Technologies will carry out the back-to-back warranty form and take delivery time on rework time.

## Hardware Support Out-of-Warranty Period

SKSpruce Technologies also provides repair services for products out of the warranty period. Please first purchase technical support services. After the receipt of damaged hardwares, SKSpruce Technologies will reply customers the maintenance and shipping costs within 5 working days and the longest time to repair is 40 days for products on production and 60 days or above for products no longer produced. Please see SKSpruce Technologies official website for detailed information.

Equipment replacement and maintenance processes should follow the SKSpruce Technologies related documentation.

# Warranty Card

Company name:	
Telephone number:	
Address:	
Product:	
Model:	
Serial number:	
Date of purchase:	
Manufacturer stamp: (Take effect after being stamped)	

Customer Service: 4000367800

Manufacturer: SKSpruce Technologies

Official Website: [www.skspruce.com](http://www.skspruce.com)

# Maintenance Record

Item: \_\_\_\_\_

After sale: \_\_\_\_\_

Signature: \_\_\_\_\_

Satisfied

Dissatisfied

Item: \_\_\_\_\_

After sale: \_\_\_\_\_

Signature: \_\_\_\_\_

Satisfied

Dissatisfied

Item: \_\_\_\_\_

After sale: \_\_\_\_\_

Signature: \_\_\_\_\_

Satisfied

Dissatisfied