Manuals+ — User Manuals Simplified.

JUNIPER NETWORKS AP64 Access Point Installation Guide

JUNIPER NETWORKS AP64 Access Point


Contents

Overview

The AP64 contains three IEEE 802.11ax radios that deliver 2×2 MIMO with two spatial streams when operating in multi-user (MU) or single-user (SU) mode. The AP64 can operate simultaneously in the 6GHz band, 5GHz band, and 2.4GHz band or two bands and a dedicated tri-band scan radio.
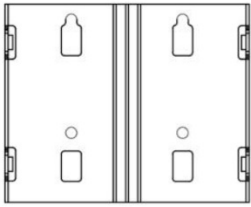
I/O ports

Ground should be connected to Earth ground using wire that is 8AWG or larger diameter.

ETH0/PoE IN	100/1000/2500BASE-TRJ45 interface that supports 802.3at/802.3bt PoE PD
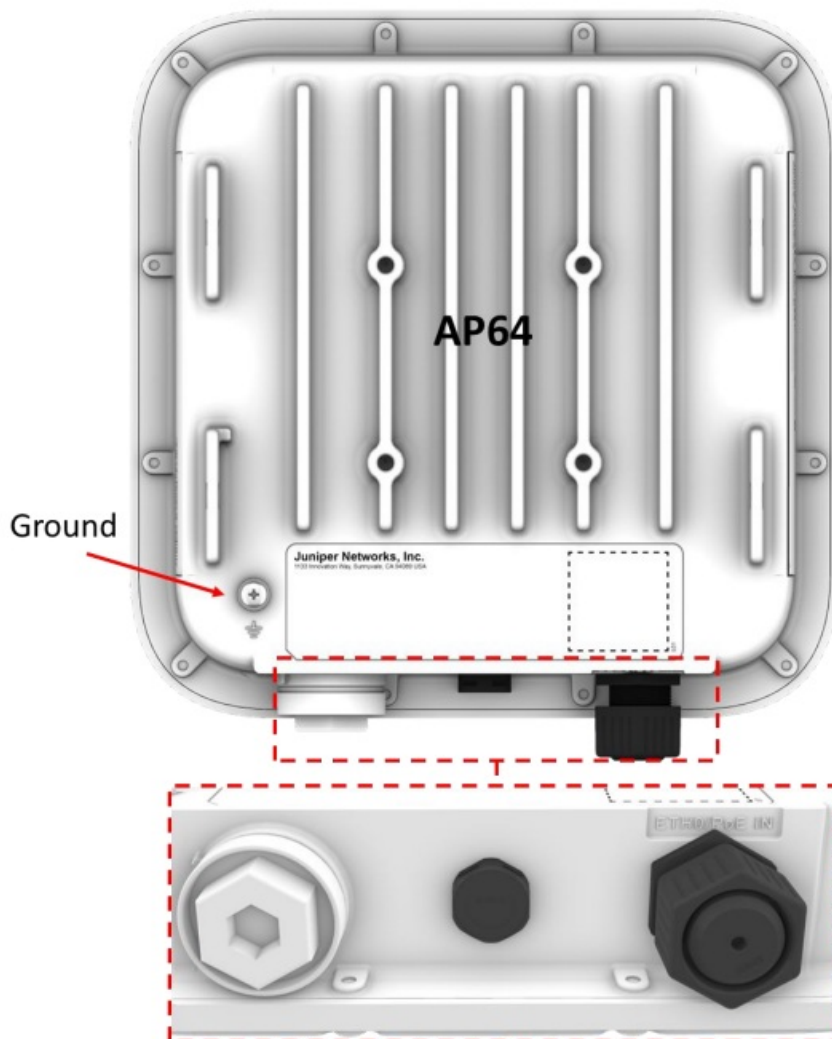
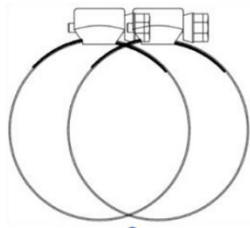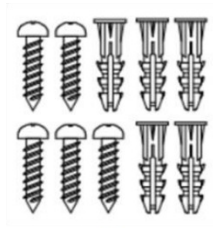
AP64 Mounting Flush Mount Bracket
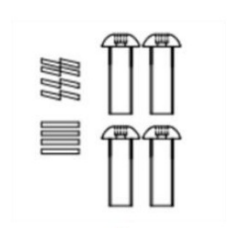
APOUTBR-FM2 Mounting kit

APOUTBR-FM2 BRACKET   HOSE CLAMPS (2PCS)   MOUNTING KIT (5SETS)
(FOR SURFACE)   AP SCREW KIT
(M6 SCREW/WASHERS/LOCK
WASHERS)(4SETS)

Articulating Mount Bracket

APOUTBR-ART2 Mounting kit
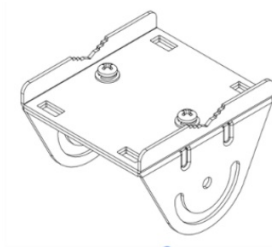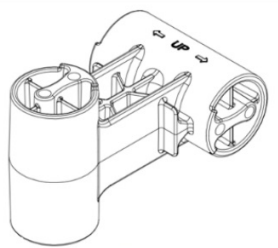
MOUNTING BRACKET1   MOUNTING BRACKET2   MOUNTING BRACKET3   BOLTS / NUTS / M6 SCREWS
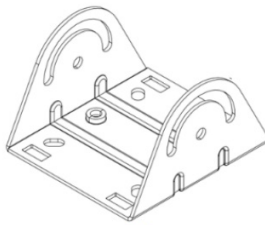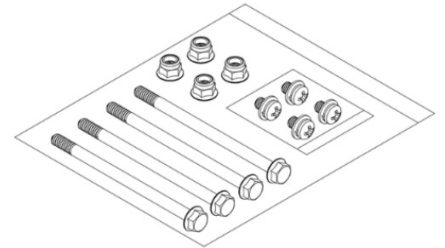
Flush Mount to Surface

Step1. Drill 4 holes into the surface. Insert anchors if appropriate e. Insert the 2 upper screws and lighten halfway into the surface. Install the APOUTBR-FM2 onto the surface and tighten the 4 screws to the surface.
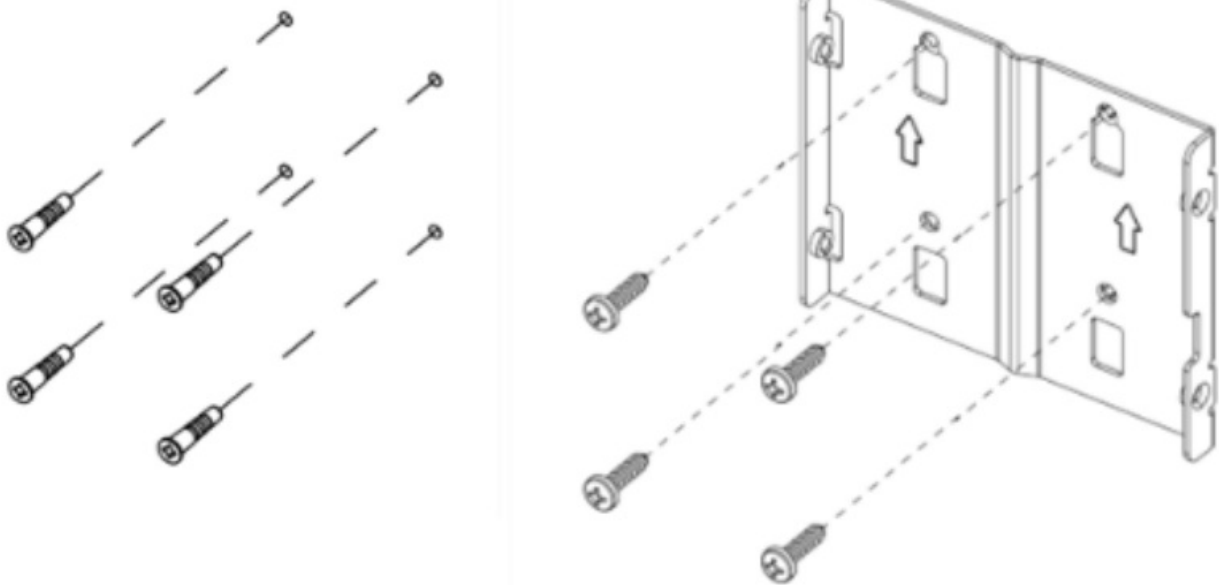
Step2 . Install the AP64 onto t he APOUTBR-FM2.
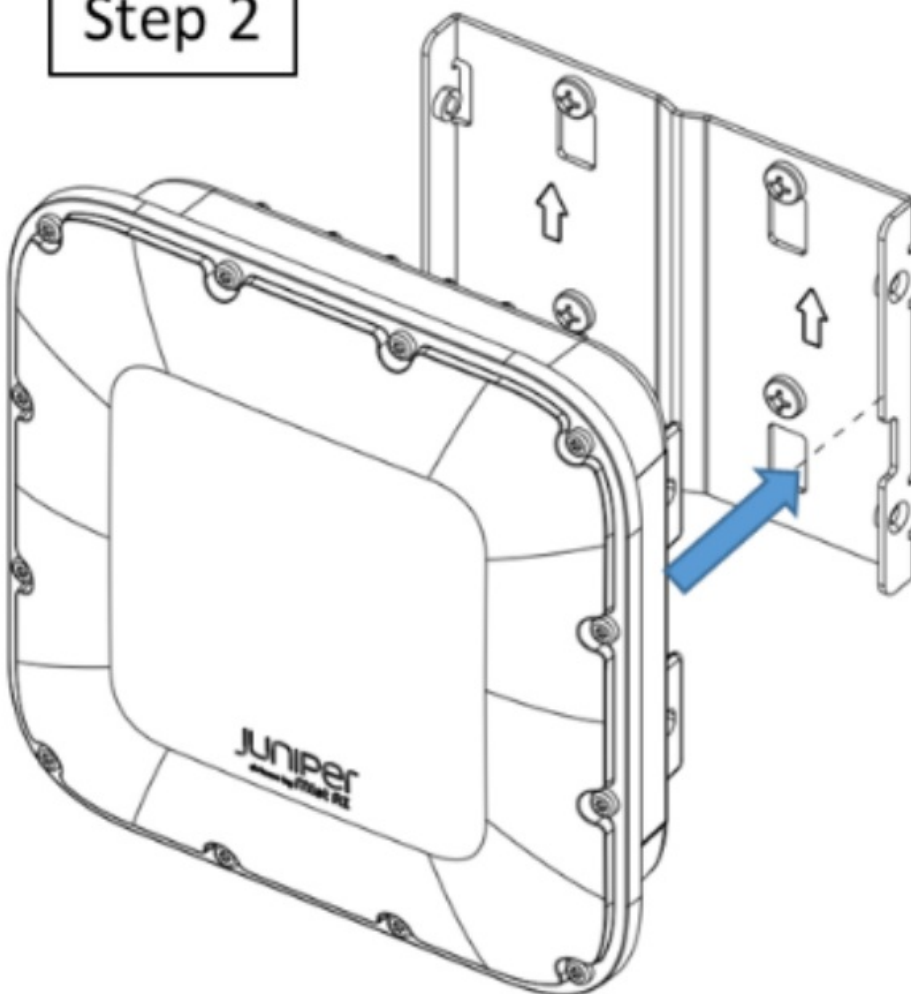
Step3. Attach t he AP64 to the APOUTBR-FM2 using the provided screws and washers.

Lock Washer

Step 3

M6L16
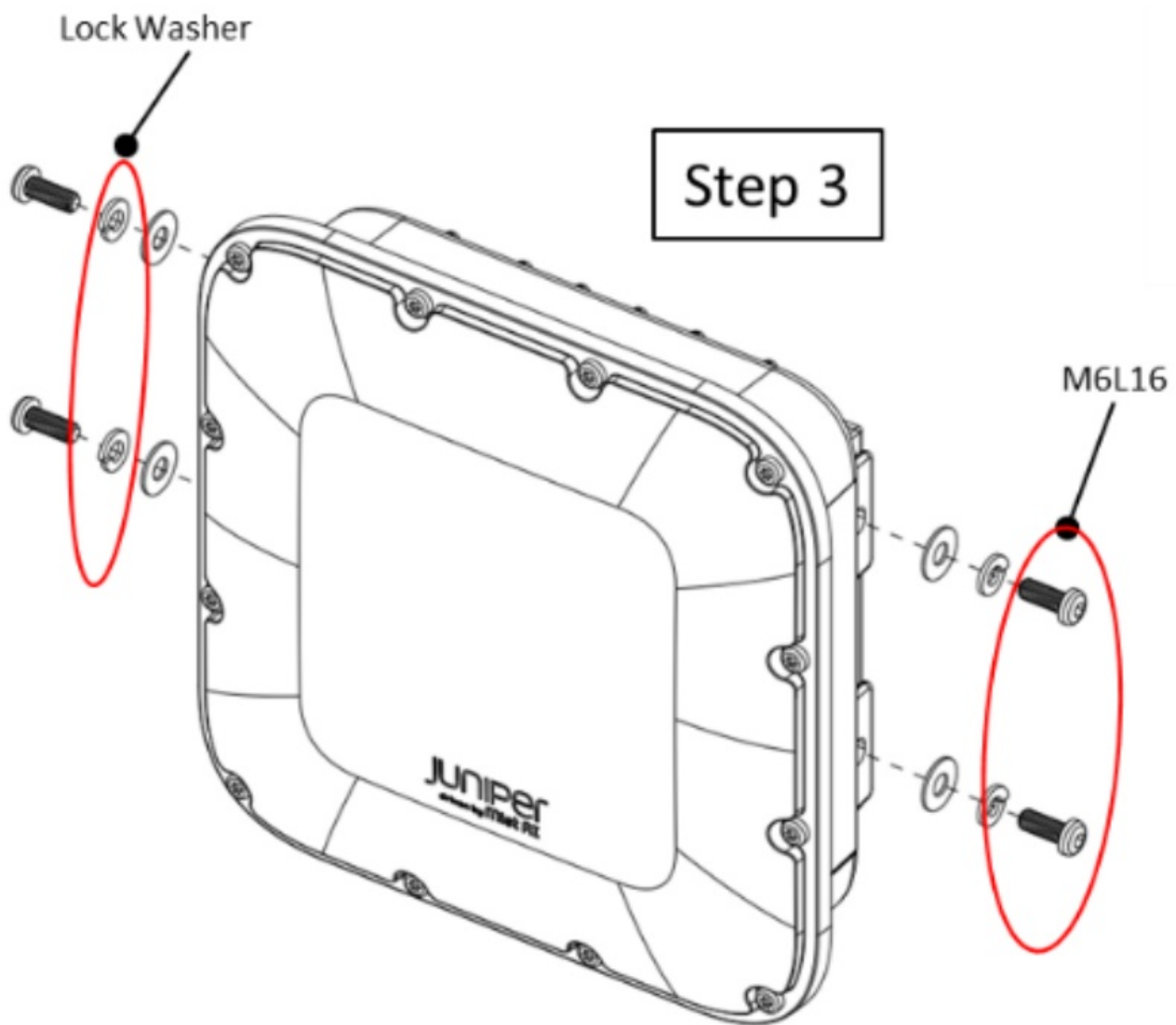
Flush Mount to Pole

Step 1 Assemble the hose clamp onto the APOUTBR-FM2.
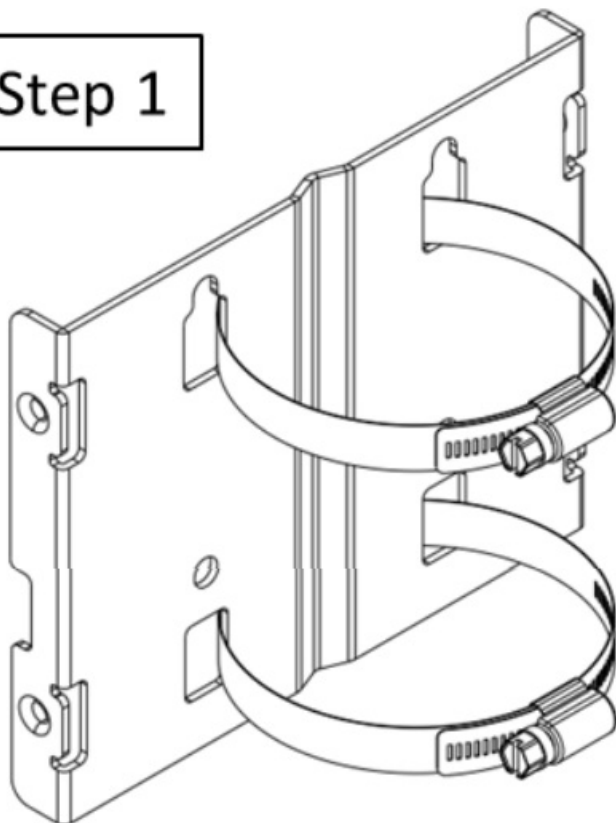
Step 2 Secure the APOUTBR-FM2 to the pole by lightening the hose clamp.
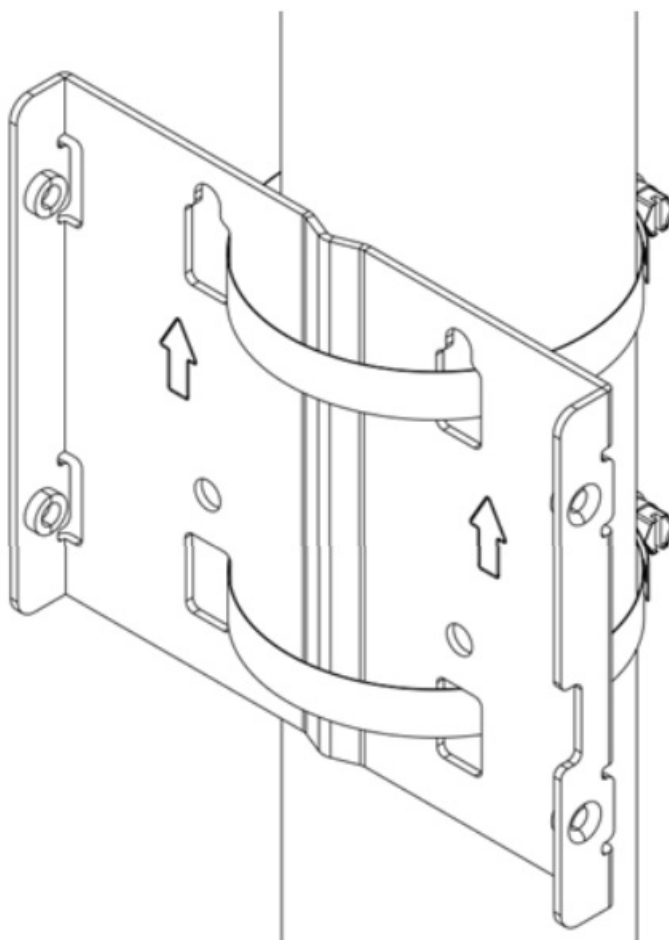
Step 3 Attach the AP64 to the APOUTBRFM2 using the provided screws and washers.
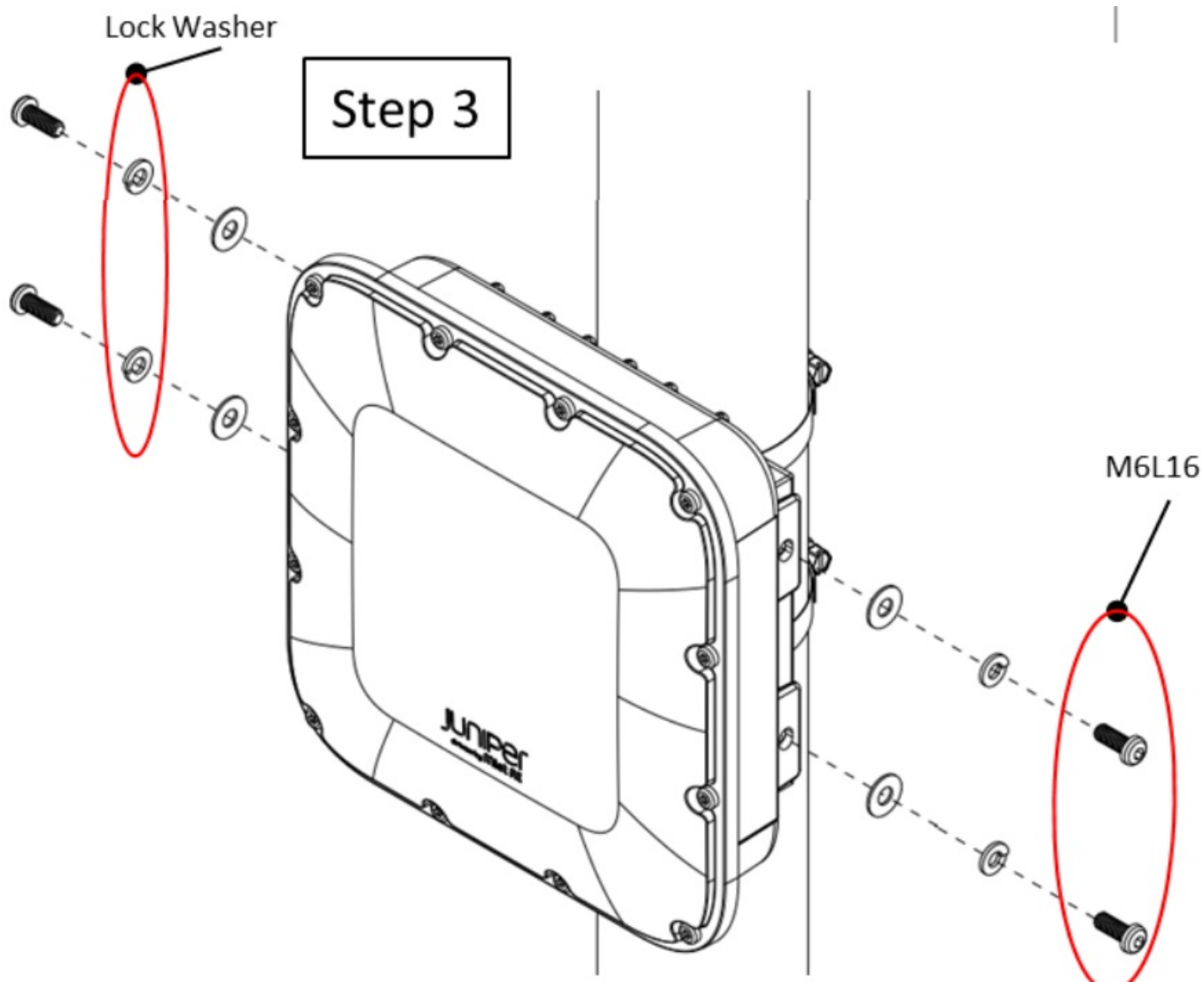
Articulating Mount to Surface

Step 1 Disassemble APOUTBR-ART2 Mounting Bracket!.
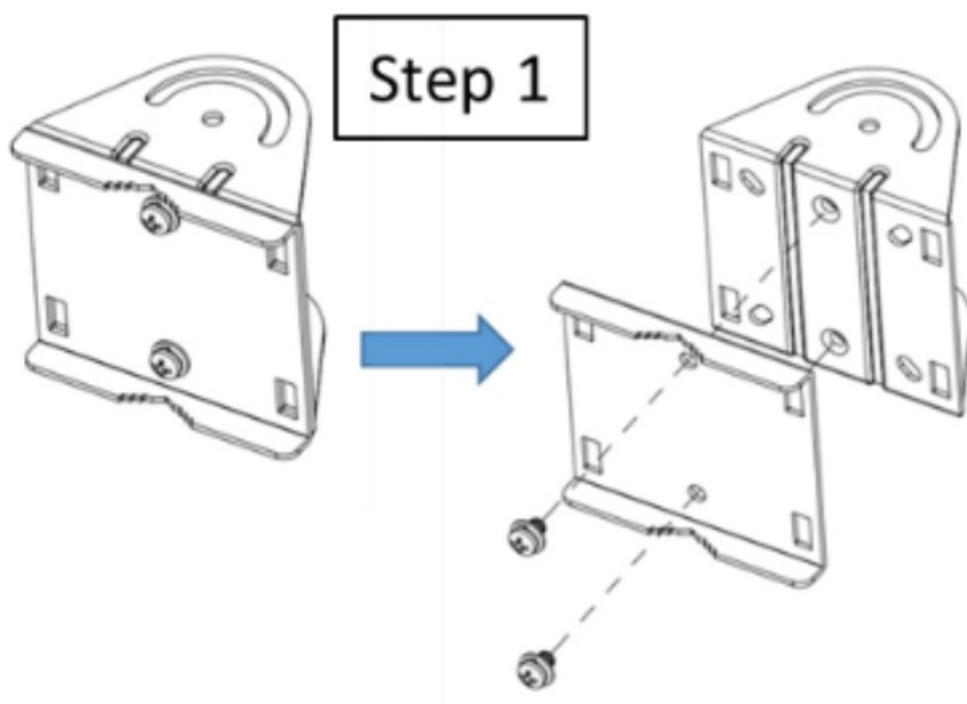
Step 2 Install APOUTBR-ART2 Mounting Bracket! to the surface.
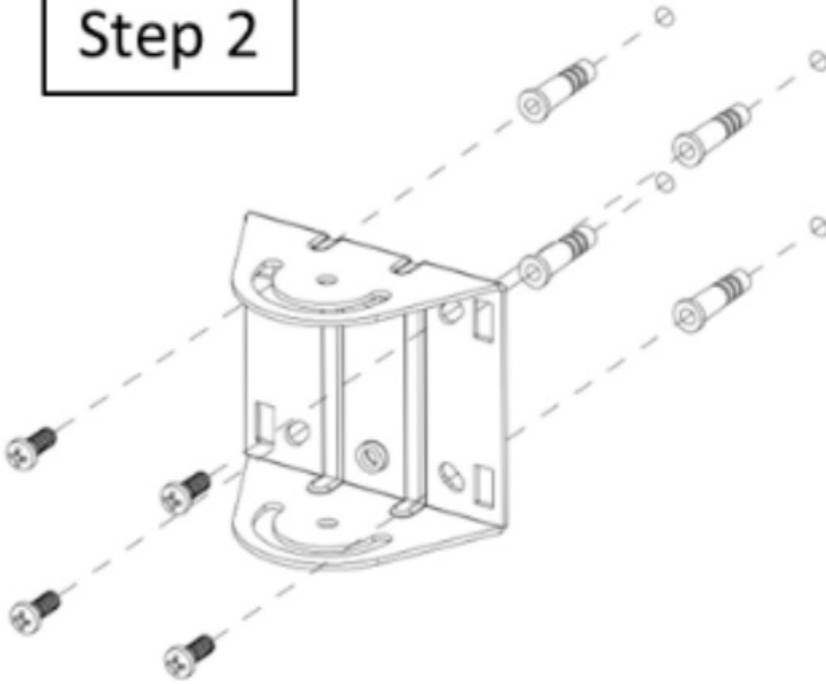
Step 3 Assemble APOUTBR-ART2 Mounting Bracket2 to Brace kept!. Attach the side with "←UP →" to Bracket!.
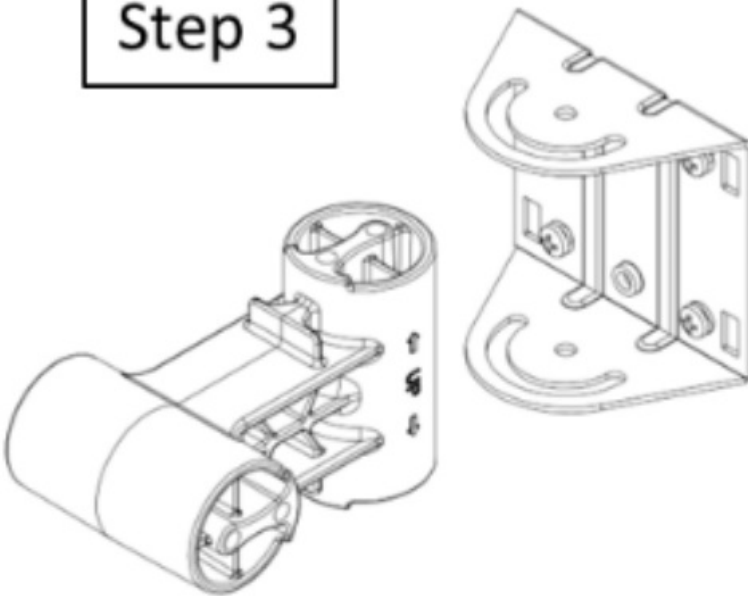
Step 4 Install the APOUTBR-ART2 Mounting Bracket3 to the AP64.
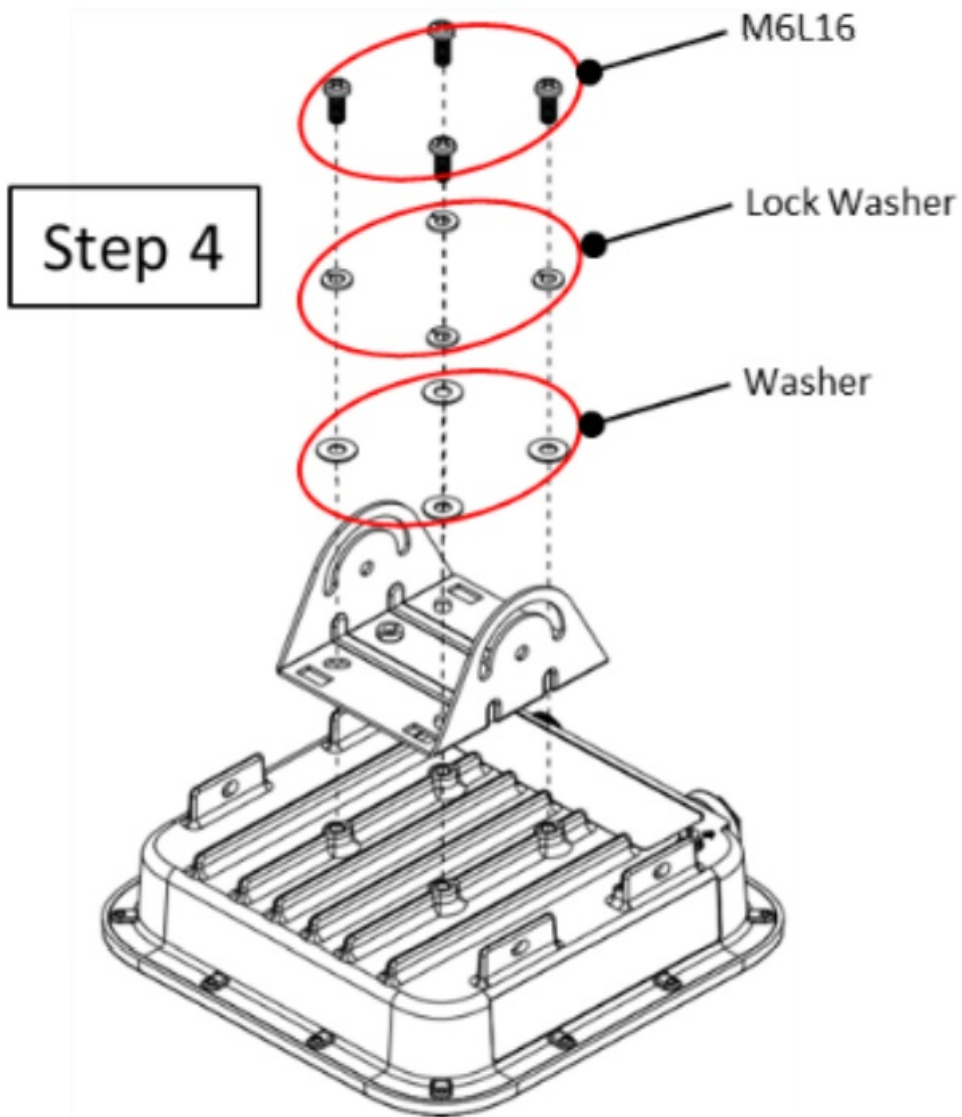
Step 5 Assemble the AP64 with Bracket3 to the Bracket2 using the long screws and nuts.

Articulating Mount to Pole

Step 1 Install APOUTBR-ART2 Mounting Bracket to the pole using the hose clamps.
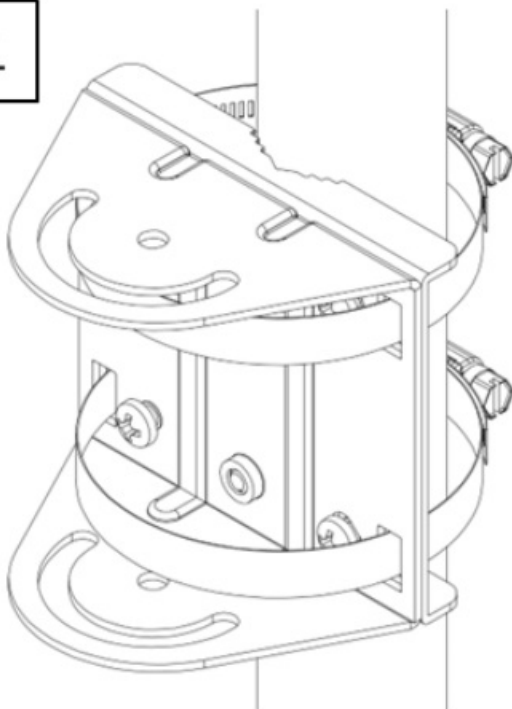
Step 2 Assemble APOUTBR-ART2 Mounting Bracket2 to Bracket. Attach the side with "←UP →" to Bracket.
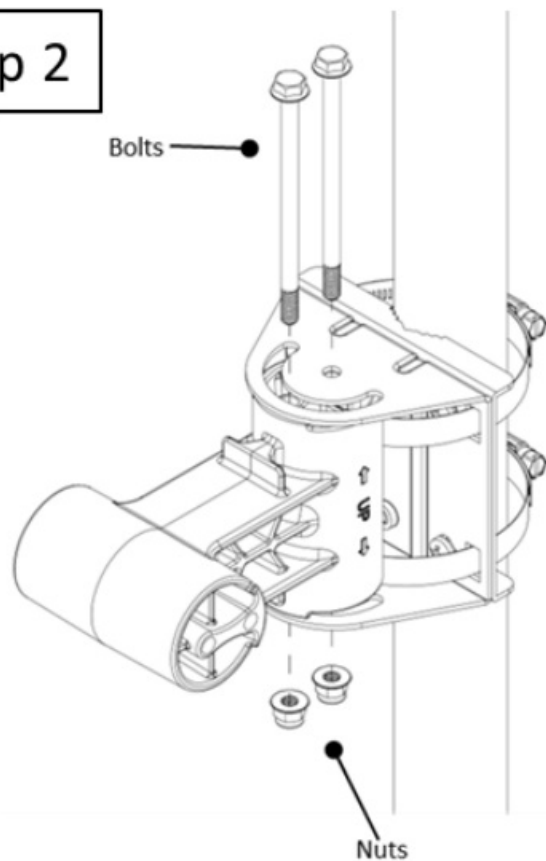
Step 3 Install the APOUTBR-ART2 Mounting Bracket3 to the AP64.
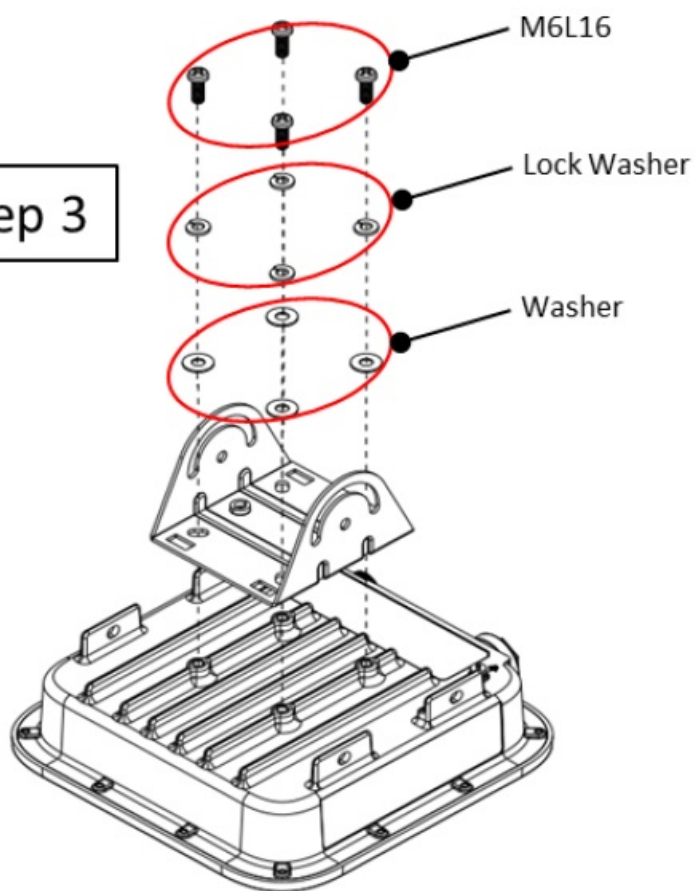
Step 4 Assemble the AP64 with Bracket3 to the Bracket2 using the long screws and nuts.

Step 5
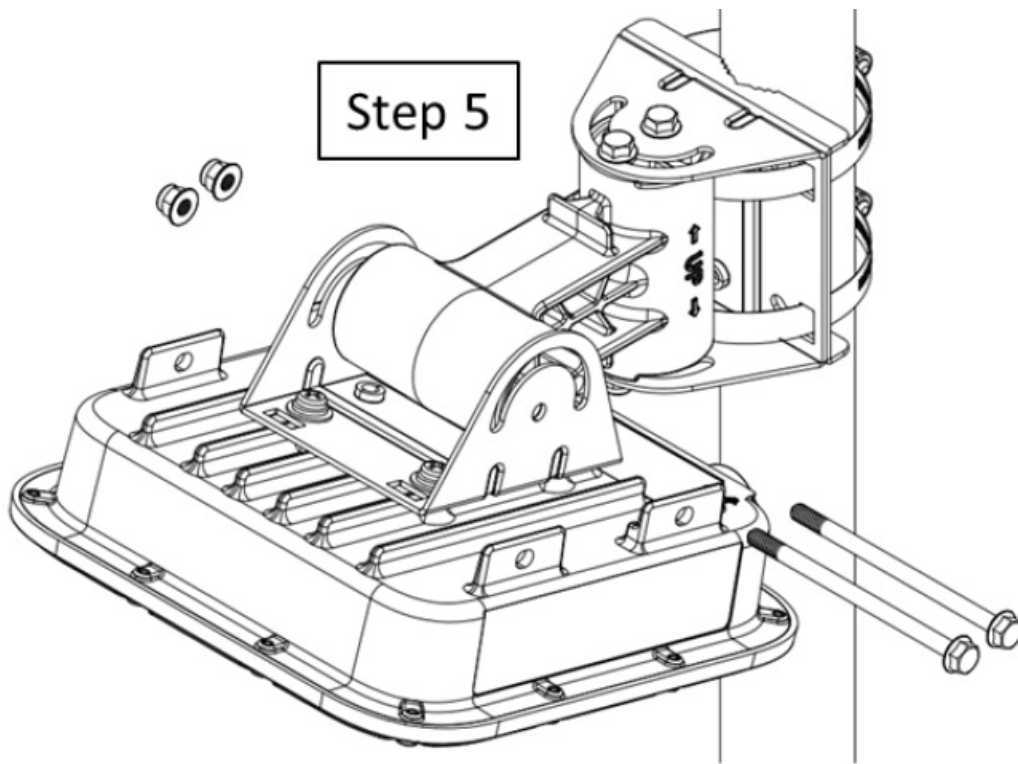
Connecting RJ45 Cable Gland

Step1. Disassemble cable gland

Step 1
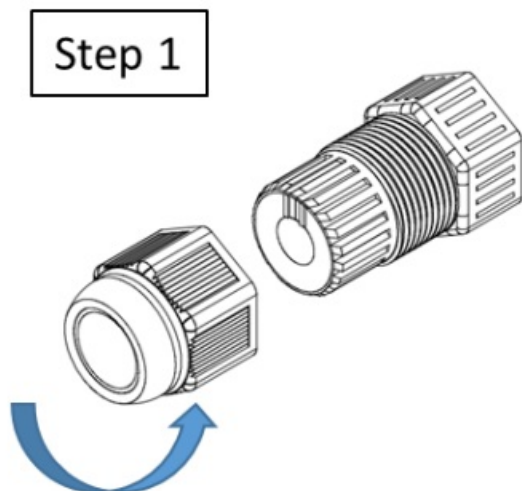
Step2. Remove the blue seal from the cable gland. Select the proper sea l: Blue seal diameter is 7mm – 9.Smm Red sea l diameter is 5.5mm – 7mm.
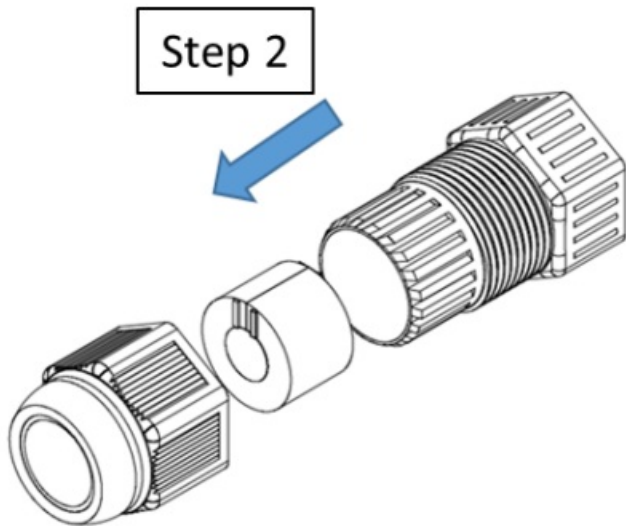
Step3. Open the seal, squeeze where you see the 2 lines, and insert the Ethernet cable thru the nut and seal.
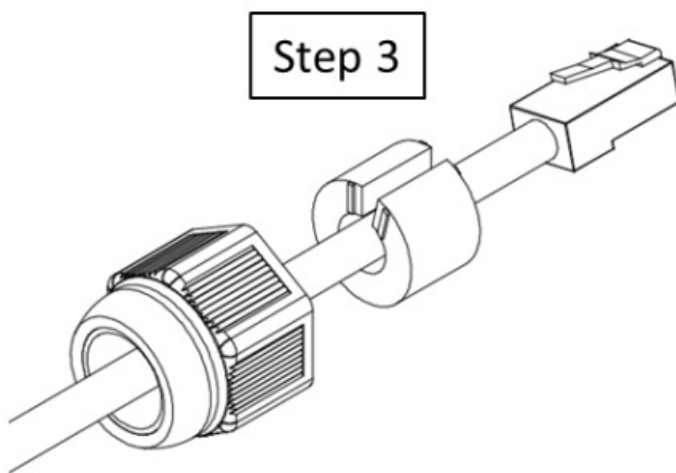
Step4. Push Ethernet cable thru the gland. Push the sea l into the gland and loosely tighten the nut.
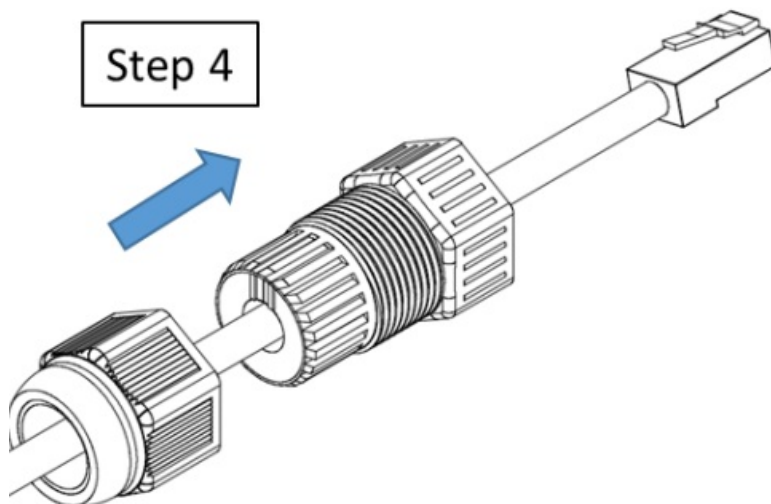
Steps. Connect the RJ45, tighten the cable gland to the AP64 meeting a torque spec of 10-12kg-cm, and fully tighten the nut to the cable gland meeting a torque spec of 7-l0kg-cm

Step 5
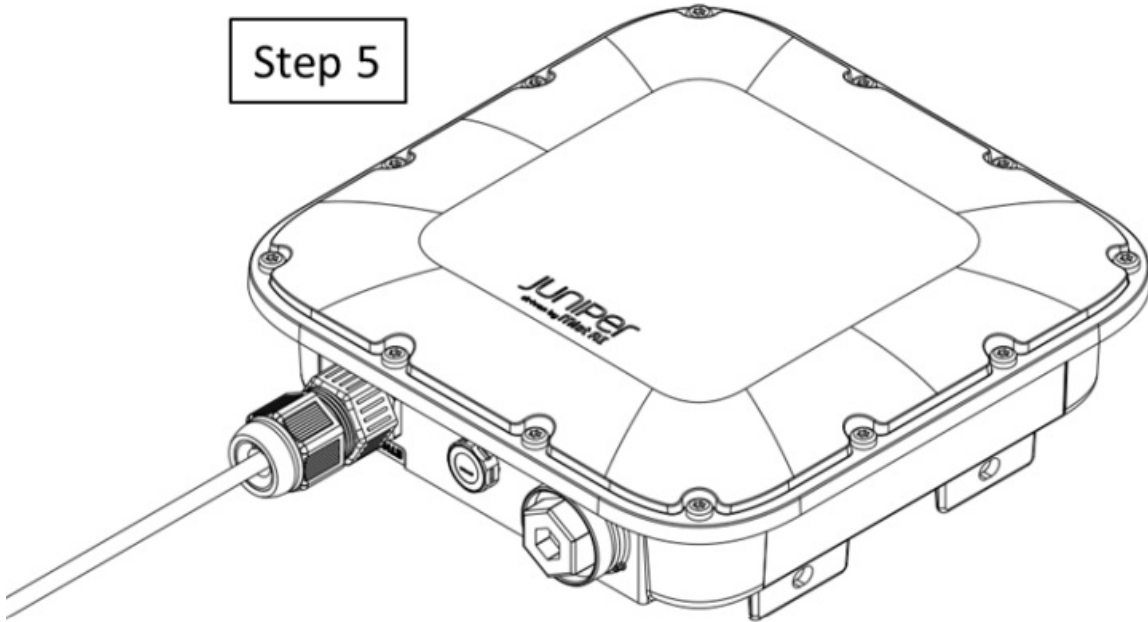
Technical Specifications:

Feature	Description
Power options	802.3at/802.3bt PoE
Dimensions	215mm x 215mm x 64mm (8.46in x 8.46in x 2.52in)
Weight	AP64: 1.50 kg (3.31 lbs)
Operating temperature	AP64: -40° to 65° C without solar loading AP64: -40° to 55° C with solar loading
Operating humidity	10% to 90% maximum relative humidity, non-condensing
Operating altitude	3,048m (10,000 ft)
Electromagnetic emissions	FCC Part 15 Class B
I/O	1 – 100/1000/2500BASE-T auto-sensing RJ-45 with PoE
RF	2.4GHz or 6GHz – 2×2:2SS 802.11ax MU-MIMO & SU-MIMO 5GHz – 2×2:2SS 802.11ax MU-MIMO & SU-MIMO **1×1:** 1SS 802.11ax 2.4GHz/5GHz/6GHz scan 2.4GHz BLE with Antenna **ZigBee:** 802.15.4 **Thread:** 802.15.4
Maximum PHY rate	Total maximum PHY rate – 3600 Mbps 6GHz – 2400 Mbps 5GHz – 1200 Mbps 2.4GHz – 600 Mbps
Indicators	Multi-color status LED
Safety standards	**CSA** 62368-1 **CAN/CSA-C22.2** No. 62368-1-19 **ICES-003:2020** Issue 7, Class B (Canada)

Warranty Information

The AP64 family of Access Points comes with a one-year limited warranty.

Included in the box:

1. AP64
2. APOUTBR-FM2
3. RJ45 cable gland

Ordering Information:

Access Points:

AP64-US	802.11ax WiFi6E 2+2+2 AP – Internal Antenna for the US Regulatory domain
AP64-WW	802.11ax WiFi6E 2+2+2 AP – Internal Antenna for the WW Regulatory domain

Mounting bracket included in the box:

APOUTBR-FM2	Flush mount bracket for AP

Optional accessory bracket:

APOUTBR-ART2	Articulating mount for AP

Power Supply options:

802.3at or 802.3bt PoE power

Regulatory Compliance Information:

If you need further assistance with purchasing the power source, please contact Juniper
Networks, Inc.

FCC Requirement for Operation in the United States of America:

FCC Part 15.247, 15.407, 15.107, and 15.109
FCC Guideline for Human Exposure
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This
equipment should be installed and operated with minimum distance between the radiator & your body; AP64 –
20cm 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.
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 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 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.
  FCC Caution
- Any changes or modifications not expressly approved by the party responsible for compliance could void the
  user's authority to operate this equipment.

- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- The 5.925 ~ 7.125GHz operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet.
- Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or Communications with unmanned aircraft systems.

Industry Canada

Innovation, Science and Economic Development Canada's license-exempt RSS(s).
Operation is subject to the following two conditions:

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

IC Caution

1. The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
2. The maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to- point and non-point-to-point operation as appropriate; and.
3. Operation on oil platforms, cars, trains, boats and aircraft shall be prohibited except for on large aircraft flying above 10,000
4. Devices shall not be used for control of or communications with unmanned aircraft systems.
5. The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite
6. The transmitter module may not be co-located with any other transmitter or antenna.

Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm (AP64) between the radiator & your body.

UK

Hereby, Juniper Networks, Inc. declares that the radio equipment type (AP64) is in compliance with Radio Equipment Regulations 2017. The full text of the UK declaration of conformity is available at the following:
 https://www.mist.com/support/

The frequency and maximum transmitted Power in UK:

Bluetooth:

Frequency range (MHz)	Maximum EIRP in UK (dBm)
2400 – 2483.5	8.45

WLAN:

Frequency range (MHz)	Maximum EIRP in UK (dBm)
2400 – 2483.5	19.97
5150 – 5250	22.96
5250 – 5350	22.96
5500 – 5700	29.74
5745 – 5825	22.98
5925 – 6425	22.97

This equipment complies with UK 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. The device is restricted to indoor use only when operating in 5150 to 5350 MHz and 5945 to 6425MHz frequency ranges.

 UK (NI)

Japan

AP64 Access Point is restricted to indoor use only when operating in 5150-5350MHz and 5925 to 6425MHz frequency ranges.

Documents / Resources

 JUNIPER NETWORKS AP64 Access Point [pdf] Installation Guide
AP64 Access Point, AP64, Access Point

References

- .::| **Support - Mist**
- **User Manual**