



## BT11 Hardware Installation Guide

### Overview

The Mist BT11 delivers a BLE Array AP with internal antennas that are used for BLE based location.

## Understanding the Product

Included in the box:

- BT11

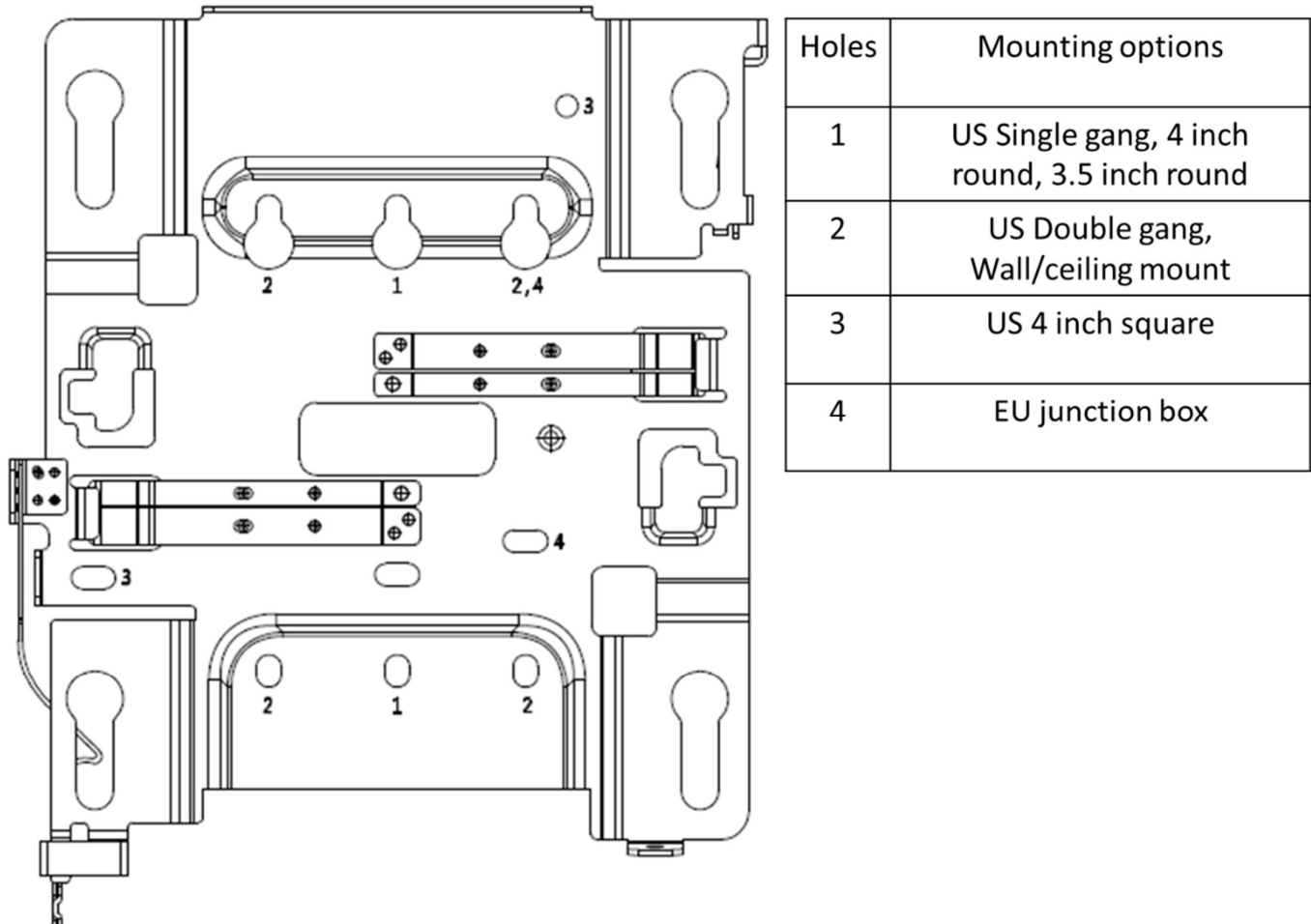
## I/O ports and Kensington lock



Reset	Reset to the factory default settings
Eth1+PoE Out	10/100/1000 BaseT RJ45 interface that can output 48V PoE
Eth0+PoE In	10/100/1000 BaseT RJ45 interface that supports 802.3at PoE PD

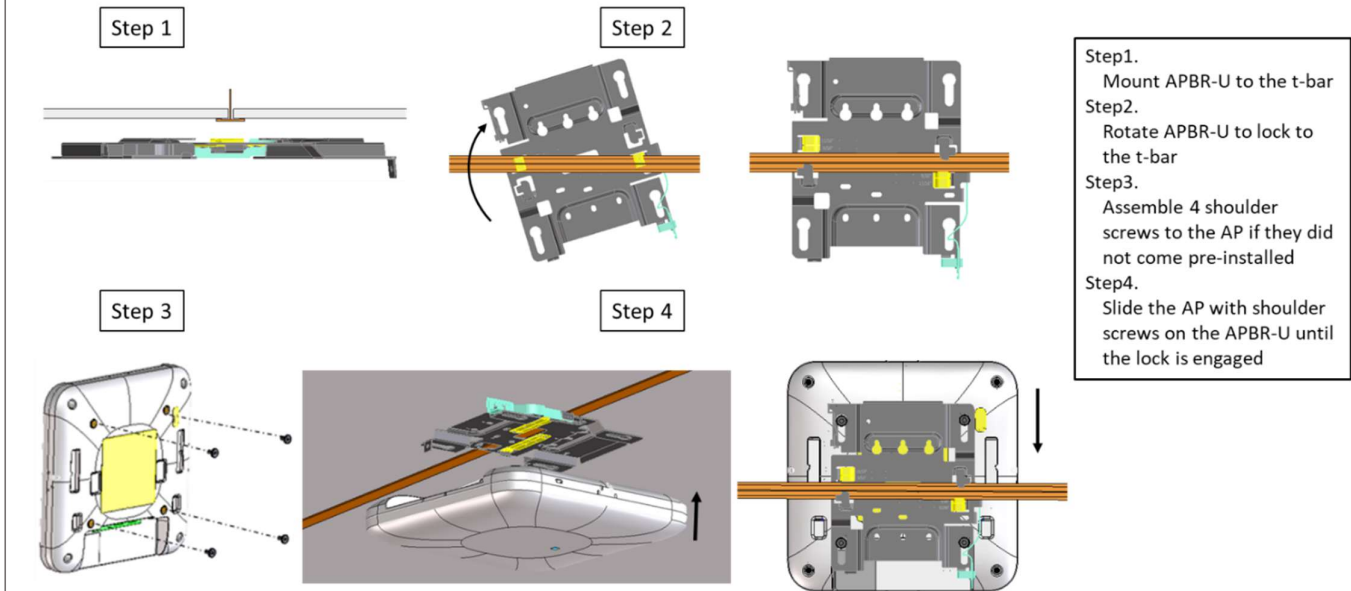
## BT11 Mounting

### APBR-U Mounting box options

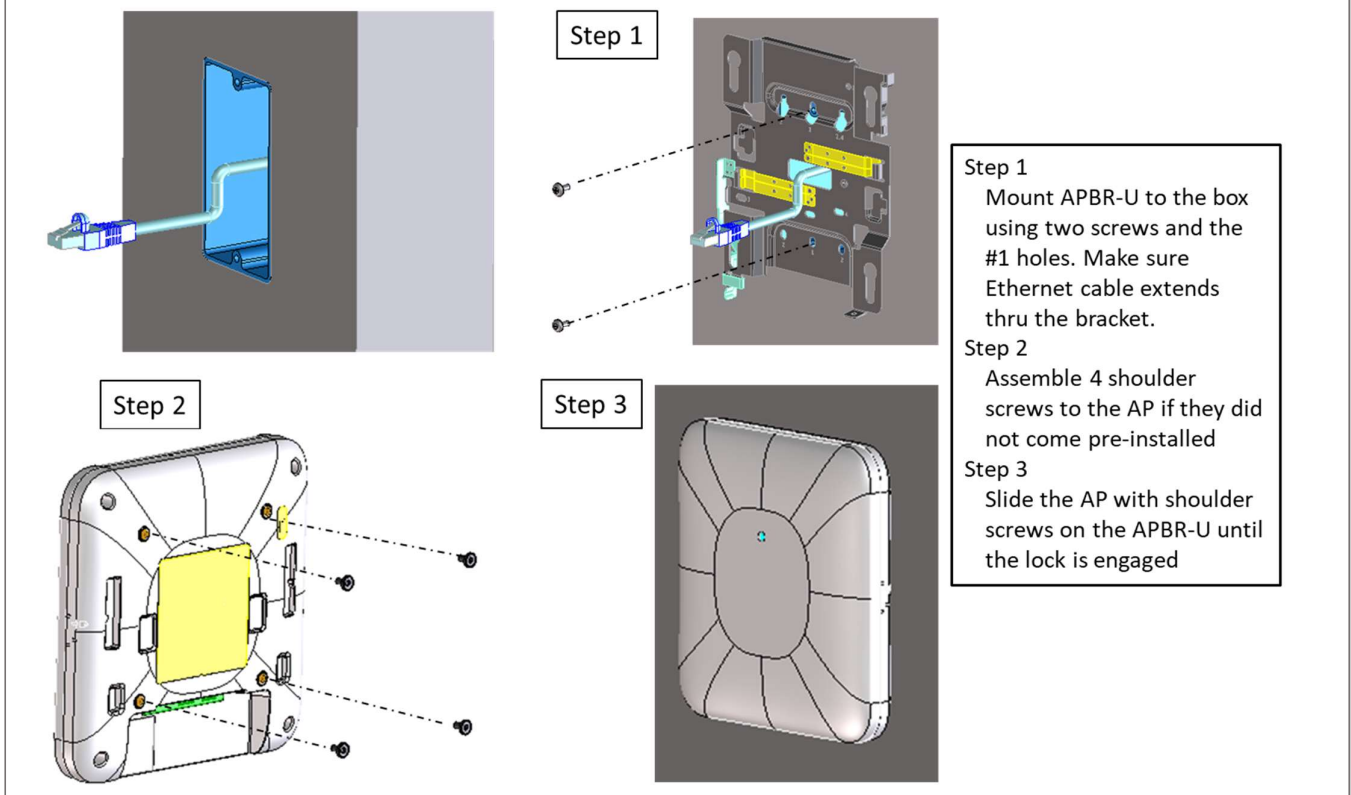


In a wall mount installation, please use screws that have a 1/4in. (6.3mm) diameter head with a length at least 2 in. (50.8mm).

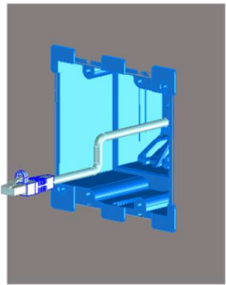
## Mounting to a 9/16 inch or 15/16 inch T-bar



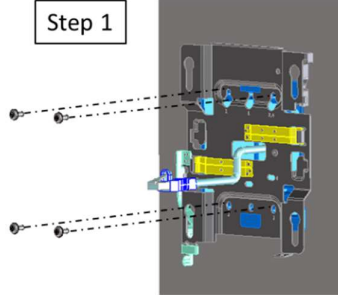
## US single gang, 3.5 or 4 inch round junction box



# US double gang junction box

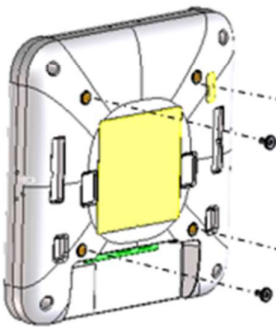


Step 1

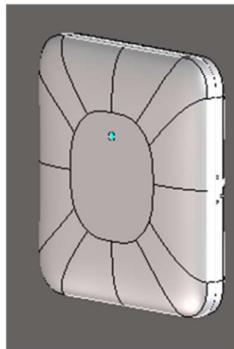


**Step 1**  
Mount APBR-U to the box using two screws and the #2 holes. Make sure Ethernet cable extends thru the bracket.

Step 2



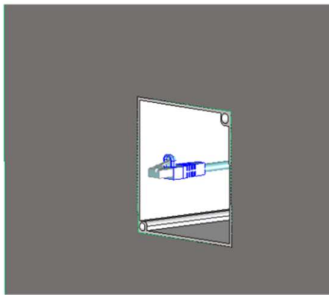
Step 3



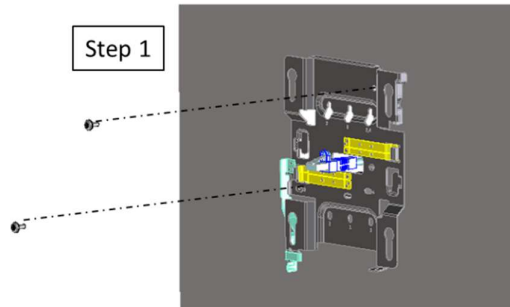
**Step 2**  
Assemble 4 shoulder screws to the AP if they did not come pre-installed

**Step 3**  
Slide the AP with shoulder screws on the APBR-U until the lock is engaged

# US 4 inch square junction box

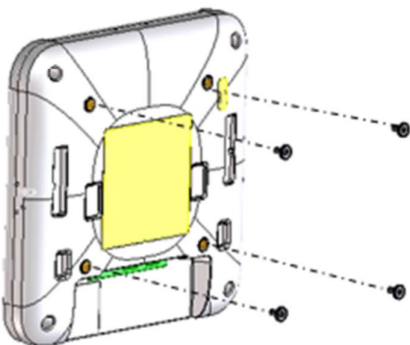


Step 1

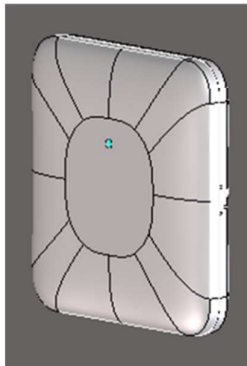


**Step 1**  
Mount APBR-U to the box using two screws and the #3 holes. Make sure Ethernet cable extends thru the bracket.

Step 2



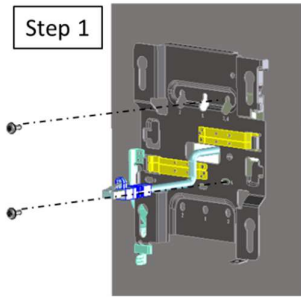
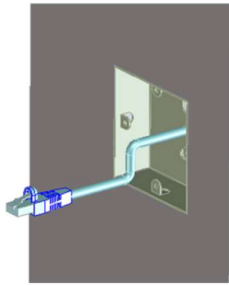
Step 3



**Step 2**  
Assemble 4 shoulder screws to the AP if they did not come pre-installed

**Step 3**  
Slide the AP with shoulder screws on the APBR-U until the lock is engaged

## EU junction box

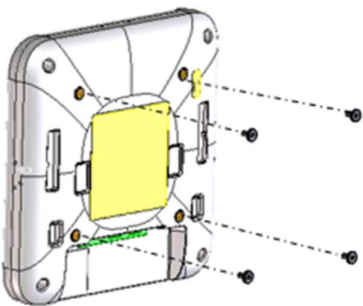


**Step 1**  
Mount APBR-U to the box using two screws and the #4 holes. Make sure Ethernet cable extends thru the bracket.

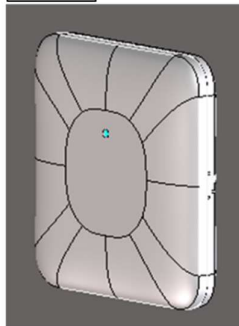
**Step 2**  
Assemble 4 shoulder screws to the AP if they did not come pre-installed

**Step 3**  
Slide the AP with shoulder screws on the APBR-U until the lock is engaged

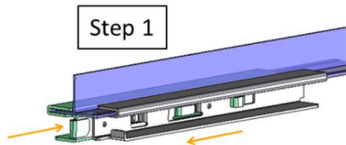
Step 2



Step 3



## Recessed 15/16 inch T-bar

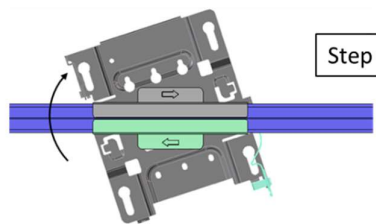


**Step 1**  
Mount the APBR-ADP-RT15 to the t-bar

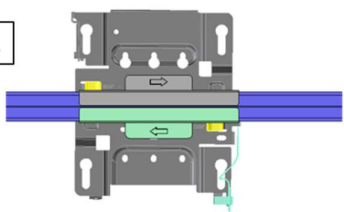
**Step 2**  
Mount the APBR-U to the APBR-ADP-RT15. Rotate the APBR-U to lock to the APBR-ADP-RT15

**Step 3**  
Assemble 4 shoulder screws to the AP if they did not come pre-installed

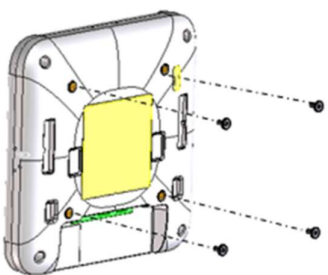
**Step 4**  
Slide the AP with shoulder screws on the APBR-U until the lock is engaged



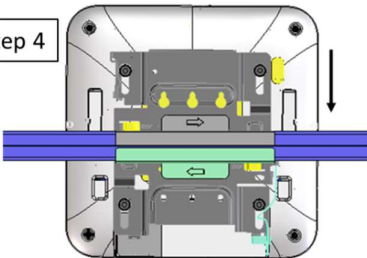
Step 2



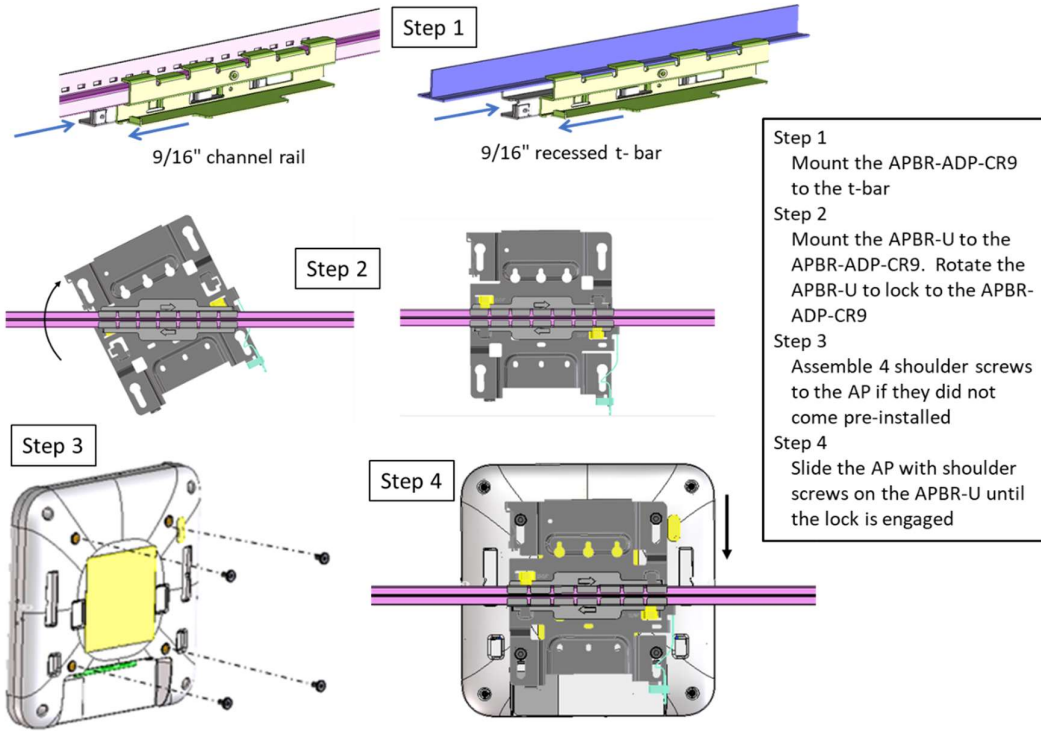
Step 3



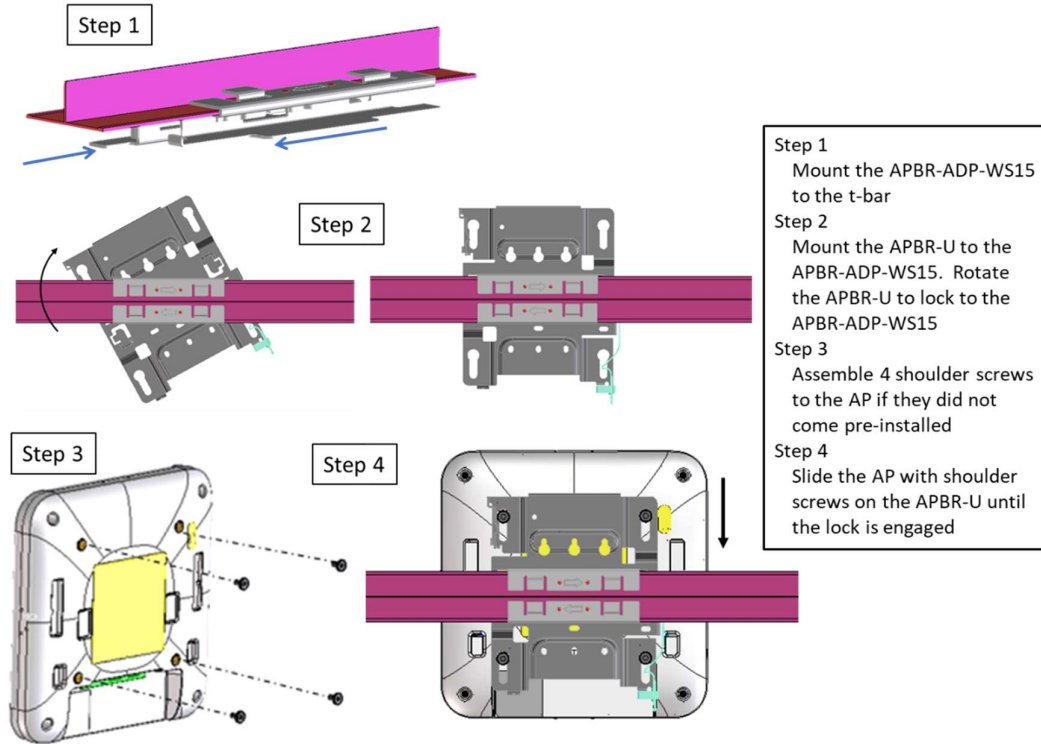
Step 4



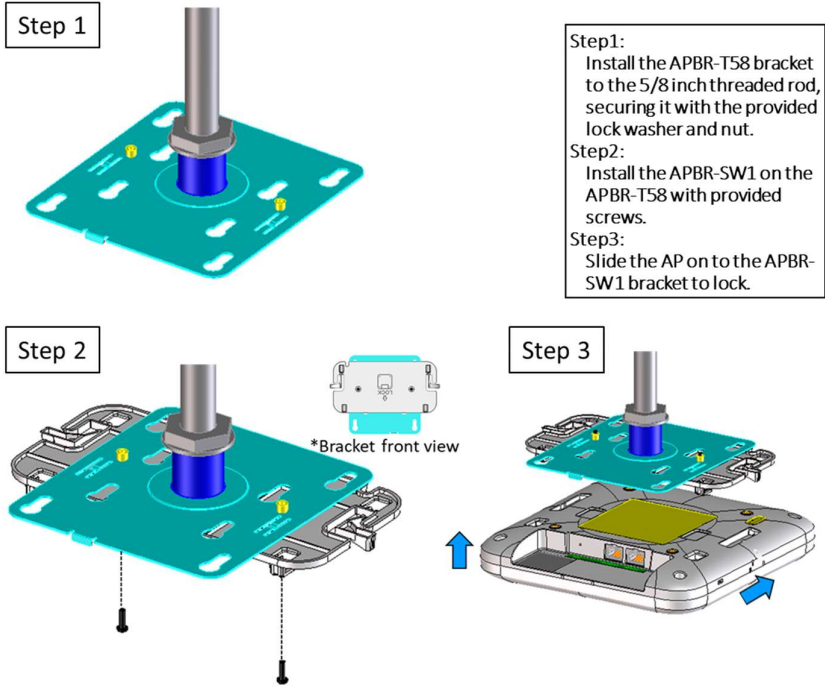
## Recessed 9/16 inch T-bar or channel rail



## 1.5 inch T-bar

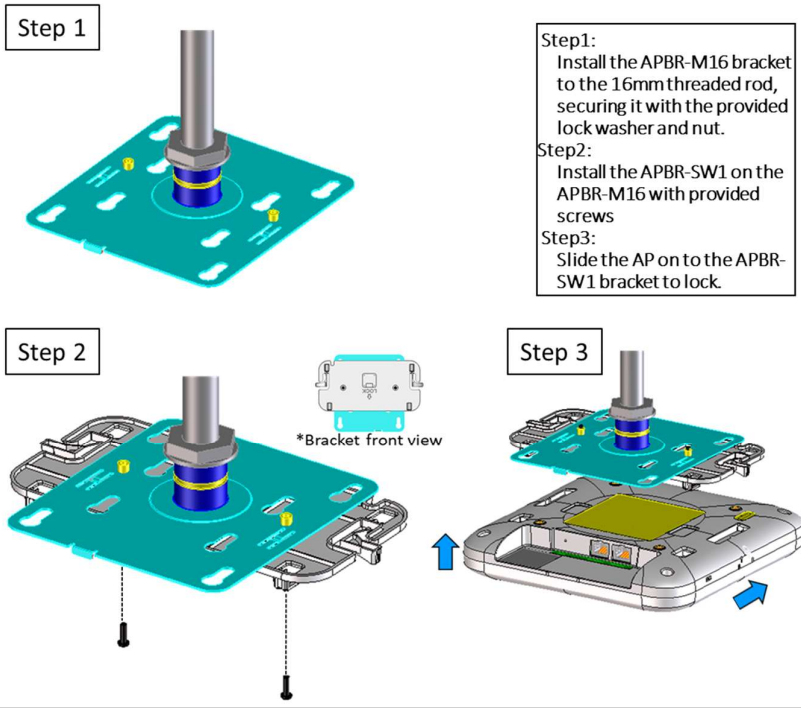


## Mounting to a 5/8 inch threaded rod



The bracket attaches to a rod that is 5/8"-11.

## Mounting to a 16mm threaded rod



The bracket attaches to a rod that is M16-2.



## Technical Specifications:

Feature	Description
Power options	802.3af/at PoE
Dimensions	203mm x 203mm x 40mm (7.99in x 7.99in x 1.57in)
Weight	0.617 kg (1.36 lbs)
Operating temperature	Internal antenna 0° to 40° C
Operating humidity	10% to 90% maximum relative humidity, non-condensing
Operating altitude	3,048m (10,000 ft)
I/O	1 - 10/100/1000BASE-T auto-sensing RJ-45 with PoE In 1 - 10/100/1000BASE-T auto-sensing RJ-45 with 48Vdc PoE Out
RF	2.4GHz BLE with Dynamic Antenna Array
Indicators	Multi-color status LED
Compliance standards	UL 60950-1 CAN/CSA-C22.2 No. 60950-1 UL 2043 FCC Part 15.247, 15.407, 15.107, and 15.109 FCC Part 15 Class B RSS-247 ICES-003 (Canada) EN 301 489-1 V2.1.1 EN 301 489-17 V3.1.1 EN 300 328 V2.1.1

The unit and all interconnected equipment must be installed indoors within the same building, including all PoE-powered network connections as described by Environment A of the IEEE 802.3af standard.

Suitable for use in environmental air space in accordance with Section 300-22(C) of the National Electrical Code, and Sections 2-128, 12-010(3), and 12-100 of the Canadian Electrical Code, Part 1, CSA C22.1.

## Warranty Information

The BT11 family of Access Points comes with a limited lifetime warranty.

## Ordering Information:

### Access Points

BT11-WW	BLE Array AP with internal antennas for the Worldwide domain
BT11-US	BLE Array AP with internal antennas compliant with TAA requirements

### Mounting brackets

APBR-U	Universal AP Bracket for T-Rail and Drywall mounting for Indoor Access Points
APBR-T58	5/8-inch threaded rod bracket
APBR-M16	16mm threaded rod bracket
APBR-ADP-CR9	Adapter for channel rail and recessed 9/16" t-rail
APBR-ADP-RT15	Adapter for recessed 15/16" t-rail
APBR-ADP-WS15	Adapter for recessed 1.5" t-rail
APBR-SW1 / BT11BR1	Drywall ceiling bracket for AP21/BT11

## Regulatory Compliance Information:

This product and all interconnected equipment must be installed indoors within the same building, including the associated LAN connections as defined by the 802.3at Standard.

## FCC Requirement for Operation in the United States of America:

### 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 20cm between the radiator & your body.

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 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 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.

## Industry Canada

This device complies with ISED's license-exempt RSS's. 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.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

### **Radiation Exposure Statement:**

This equipment complies with ISED 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.

Déclaration d'exposition aux radiations: Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

**CE**



This device complies with the Radio Equipment Directive 2014/53/EU

The frequency and maximum EIRP Power in EU:

1. 2402 – 2480 MHz: 9.98dBm