Juganu Outdoor CAP

Installation Manual

MARCH 2025

Contents

Safety Information

READ AND FOLLOW ALL INCLUDED SAFETY INSTRUCTIONS

To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards.

These safety instructions may not possibly cover all details or variations in equipment nor provide every possible contingency during installation, operation, or maintenance. For conditions or problems that are not covered sufficiently for the purchaser's or owner's purposes, please consult Juganu's Customer Service.

<u>BEFORE INSTALLING, SERVICING, OR PERFORMING ROUTINE MAINTENANCE UPON THIS EQUIPMENT</u>

- Device installation and maintenance must be performed ONLY by a qualified licensed technician.

- DO NOT INSTALL A DAMAGED PRODUCT! Inspect the package contents. If any of the device's parts were damaged during transit, do not use it. Replace any damaged parts before installing.

⚠️ CAUTION: RISK OF PRODUCT DAMAGE

- Never connect components under load.

- Leave some airspace around the device. Avoid covering device with insulation, foam, or other material that can cause overheating.

- Do not operate the device outside the ambient temperature range (−35°C to +55°C / -31°F - 131°F).

- NEVER rewire, reconfigure, or modify the device or attempt any repairs yourself. There are no user serviceable parts inside the device. If your device may require service, stop using the device immediately and contact a Juganu representative.

Introduction

Thank you for purchasing Juganu's Outdoor CAP (Centralized Access Point).
The CAP serves as a gateway device, creating an autonomous, self-managed, and scalable luminaire network. It automatically connects to Juganu luminaires to ensure reliable operation and seamless communication.

The CAP can be powered via PoE or a 48VDC, 1A power supply. Data connectivity is available through Ethernet, PoE, or fiber optic SFP ports.

This guide provides installation instructions for mounting the Outdoor CAP on a round pole (1.5"–6" diameter) or a wall. The installation location should be within 10 meters of a 48VDC power source and have access to an Internet connection.

Notes:

- All cables (Ethernet, DC, PoE, and SFP) must be outdoor rated.

- A list of compatible accessories, including 48VDC power supplies and PoE injectors, is available upon request.

Package Contents

The Outdoor CAP shipping box contains the following items.

- Assembled Outdoor CAP unit
- Round pole and wall mount kit (default)
  90° wall brackets (need to be purchased separately P\N: *JCP-BR-90DEG*)
- 2-way cable gland 2PCS (fits 6-9mm cable)
- 3-pin female cable connector (use 2 wire 20AWG cable only)

Required Tools

Ensure that you have the following tools when you perform the Outdoor CAP installation:

1. Metric Hex socket Key #5	2. 5/16" nut driver	3. No. 0 Phillips screwdriver

# Ports and LEDs

POE   RJ-45 port Socket for connecting POE or Data only to the device. (empty gland is inserted until ready for use)

SFP   For optical connection

Service   For debugging

DC POWER   48V DC input if POE power is not available

PWR LED   Green when the device receives power.

STATUS LED   Green when the device is connected to the Internet.
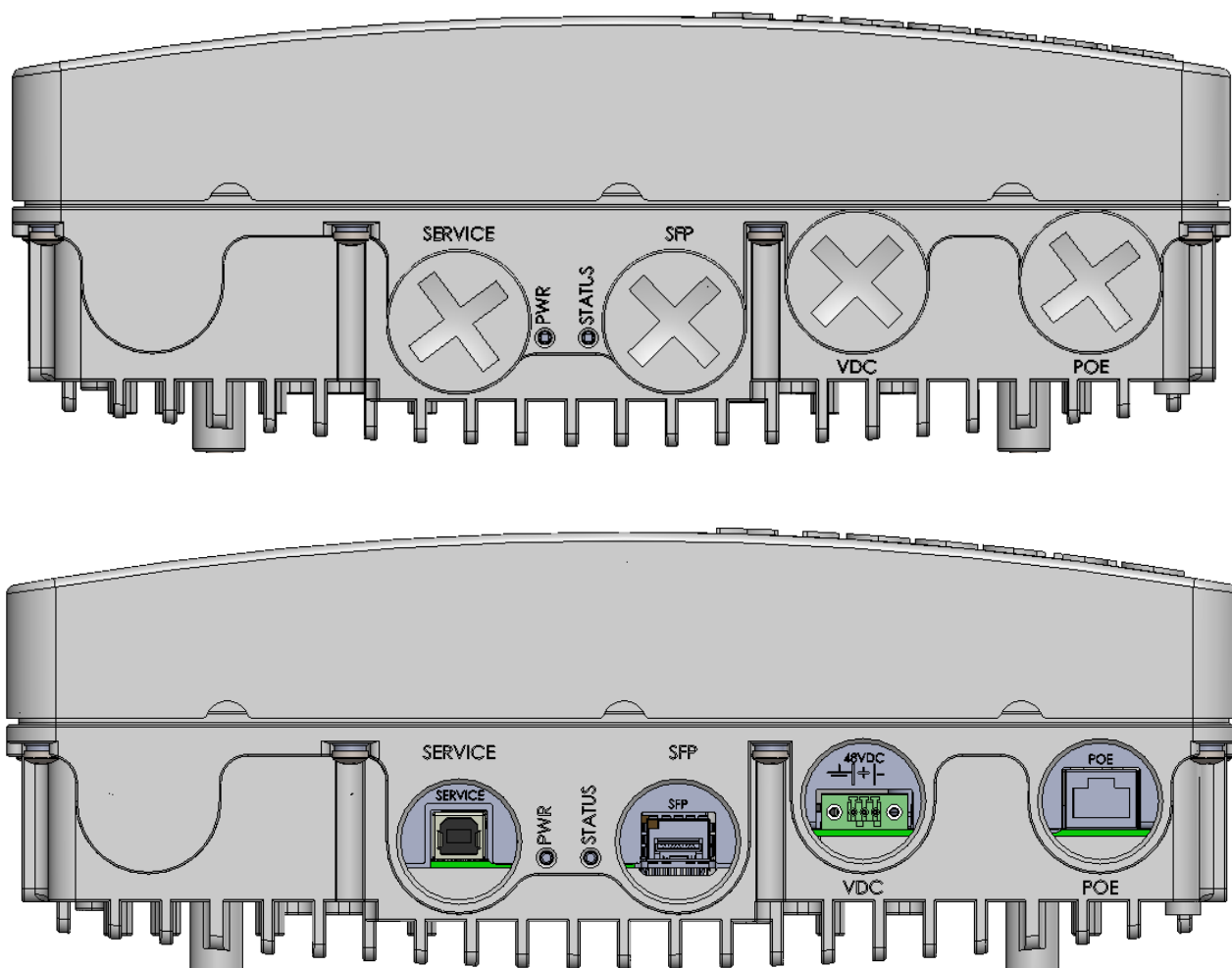
Installation Procedure

Choosing CAP installation location

1. The CAP has a directional antenna, meaning it must face at least two smart lamps during installation.
2. The recommended distance between the CAP and the first smart lamp is 30m.
3. The minimum distance between the CAP and the first smart lamp it faces is 10m.
4. The maximum distance between the CAP and the first smart lamp it faces is 60m.
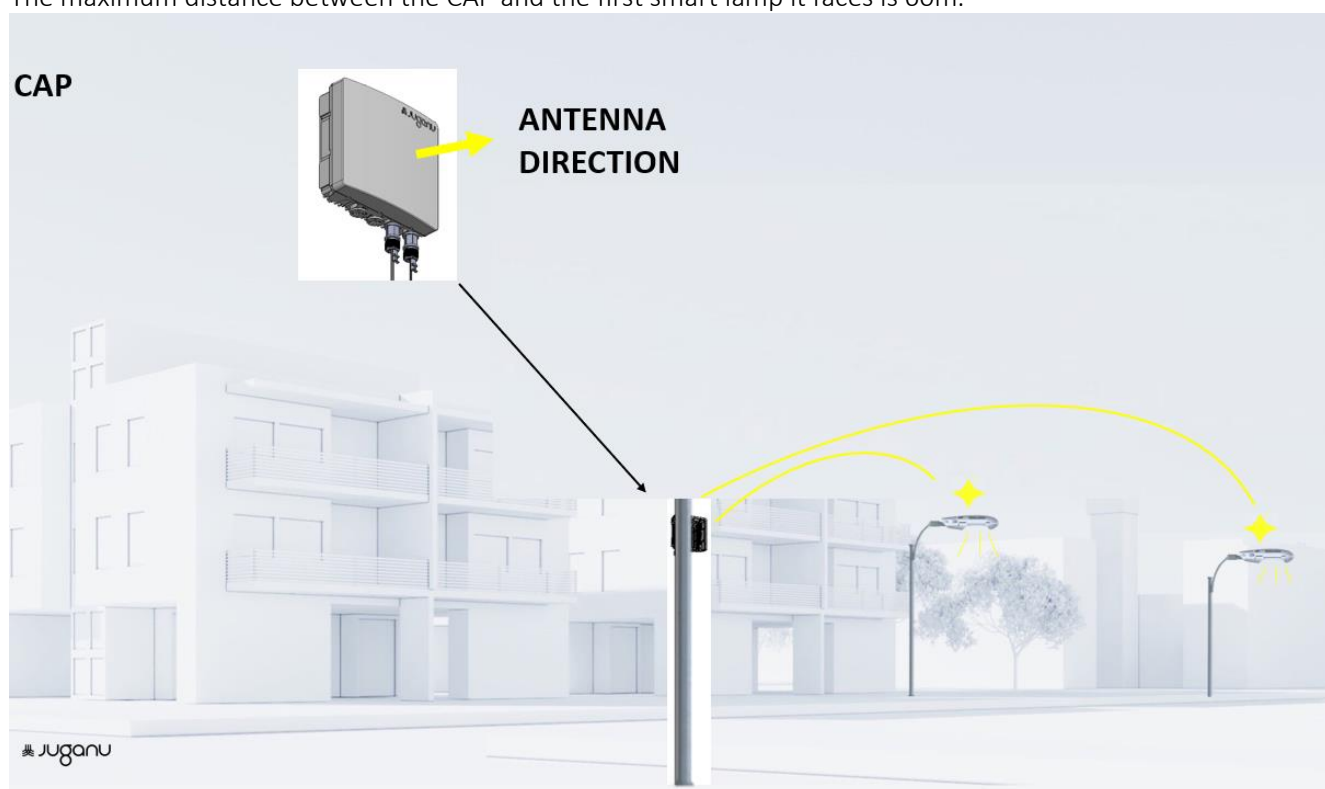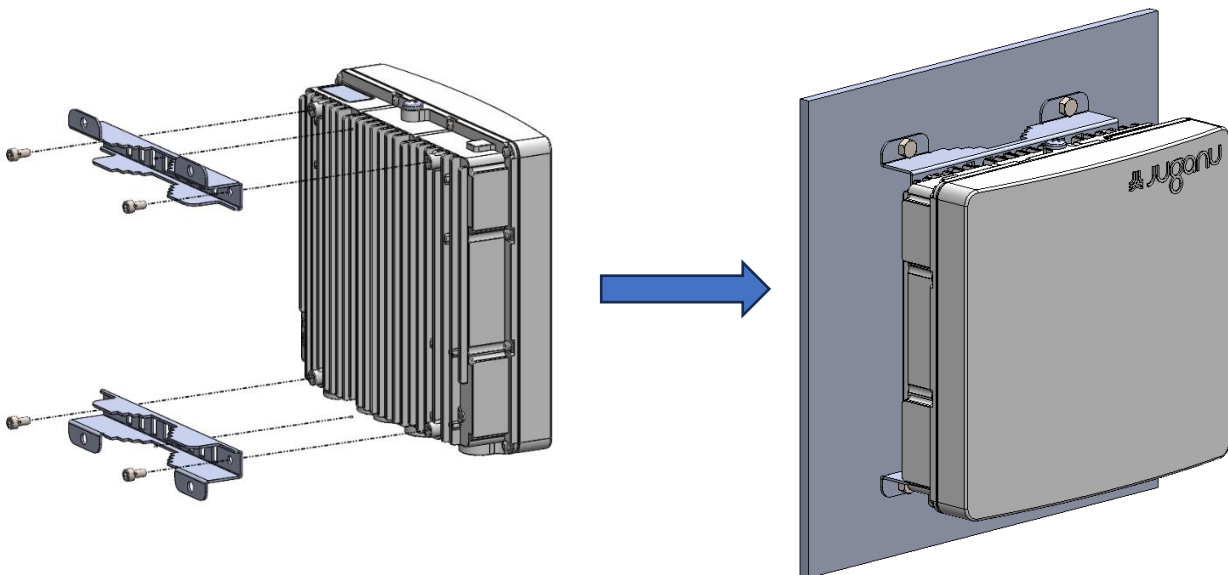
Mounting the CAP on a Wall

It is recommended to mount the CAP securely on a wall near connections to DC or PoE for power and to Internet (Ethernet) using Poe or Ethernet or SFE (fiber) ports.

Ensure that the ports/connectors are facing downward.

Ensure that the distance from the CAP to power PoE source is less than 80m.

A pole-wall mount kit is provided in the Outdoor CAP shipping box. It includes two mounting brackets, two bracket ties and fasteners.

1. Attach the two mounting brackets to the top and bottom rear of the CAP.

2. Using a hexagon socket key, tighten the four M6x12 screws, as illustrated below, to secure the CAP to the brackets.

3. Attach the unit to the wall using 4 x 8mm or 5/16 Screws. The screws are not provided with the kit.

Mounting the CAP on a Wall 90°

It is recommended to mount the CAP securely on a wall near connections to DC or PoE for power source and to Internet (Ethernet) using Poe or Ethernet or SFE (fiber) ports.

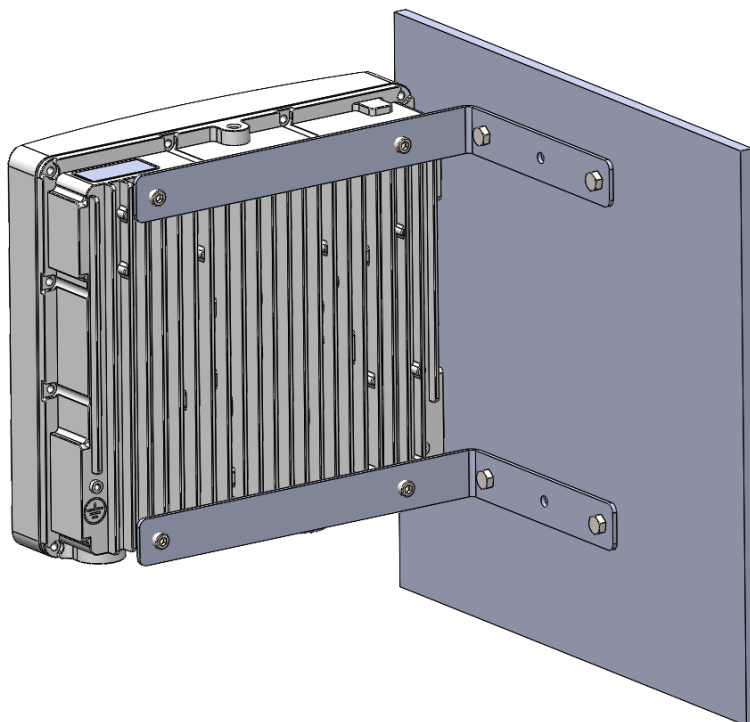Ensure that the ports are facing downward.

Ensure that the distance from the CAP to power PoE source is less than 80m.

A wall mount 90° kit is not provided in the Outdoor CAP shipping box. And should be purchased separately.

The kit includes two mounting brackets and fasteners.

4. Attach the two mounting brackets to the top and bottom rear of the CAP.

5. Using a hexagon socket key, tighten the four M6x12 screws, as illustrated below, to secure the CAP to the brackets.

6. Attach the unit to the wall using 4 x 6mm or ¼" Screws. The screws are not provided with the kit.

Mounting the CAP on a Pole

It is recommended to mount the CAP securely on a stable pole near connections to DC or Poe power source and to Internet (Ethernet) using Poe or Ethernet or SFE (Fiber) ports.
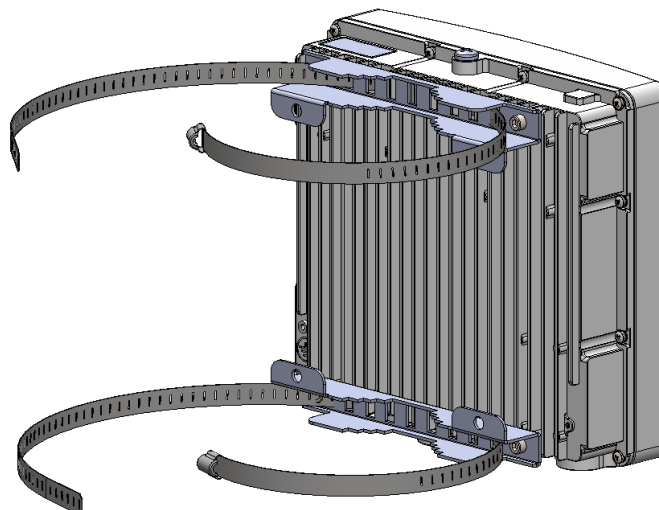
Ensure that the ports are facing downward.

A pole mount kit is provided in the Outdoor CAP shipping box. It includes two mounting brackets and two bracket ties

1. Take the two mounting brackets and Thread the bracket ties through the most suitable slots on both sides of each bracket.
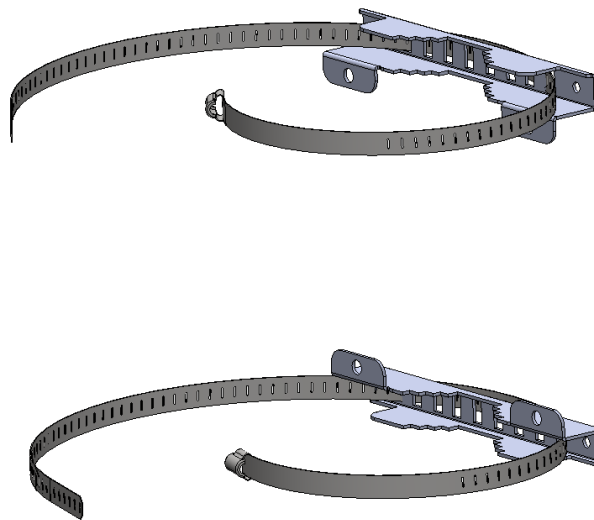
2. Attach the two mounting brackets to the top and bottom rear of the CAP.

3. Using a hexagon socket key, tighten the four M6x12 screws, as illustrated below, to secure the CAP to the brackets.

4. Tie the bracket ties around the pole. Ensure that the ports are facing downward.
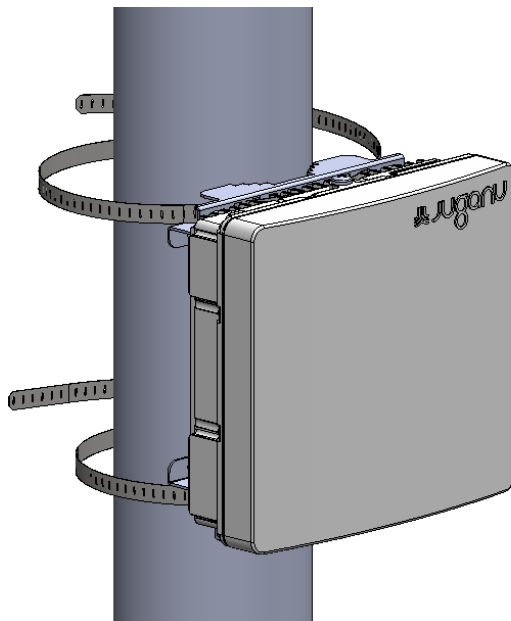
5. Using a nut driver, tighten each tie's nut to ensure that the CAP is secured tightly to the pole

6. Ensure that the CAP does not slide down the pole or shift horizontally.
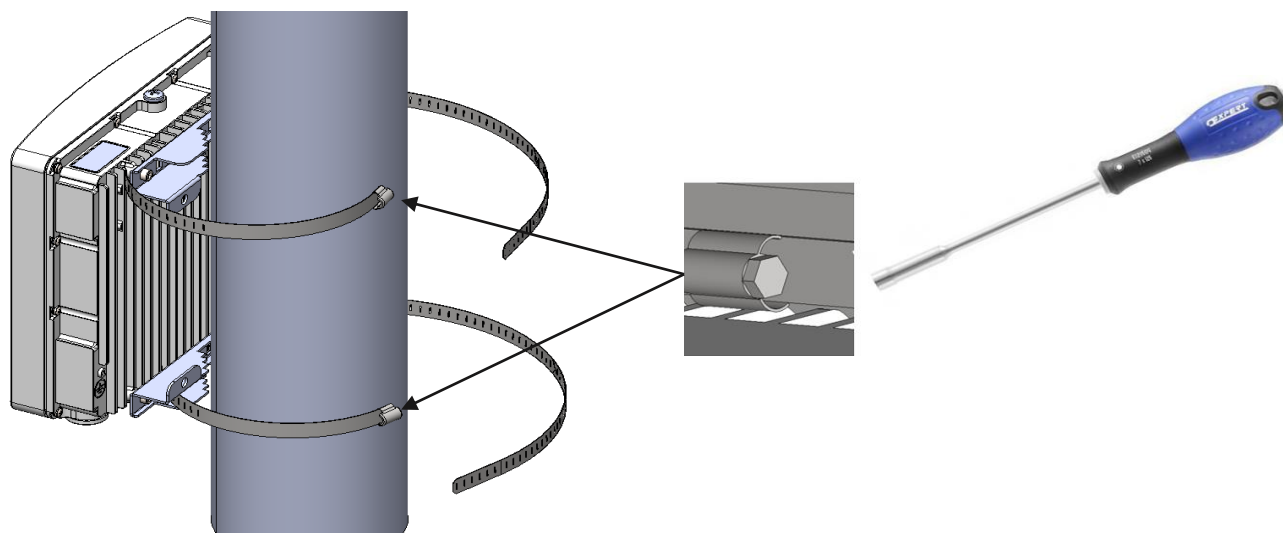
Connection of CAP

The power supply and Ethernet ports/connectors are located at the bottom of the CAP. There are four connection options:

1. **DC Power + Ethernet (ETH)**
2. **Power over Ethernet (PoE)**
3. **DC Power + Small Form-factor Pluggable (SFP) module**
4. **PoE (power only, no data) + SFP**

Depending on the chosen connection variant, replace the required port's plastic cover with the M28 gland provided in the accessory kit.

All cables must be suitable for outdoor use and must be continuous, with no splits or extensions.
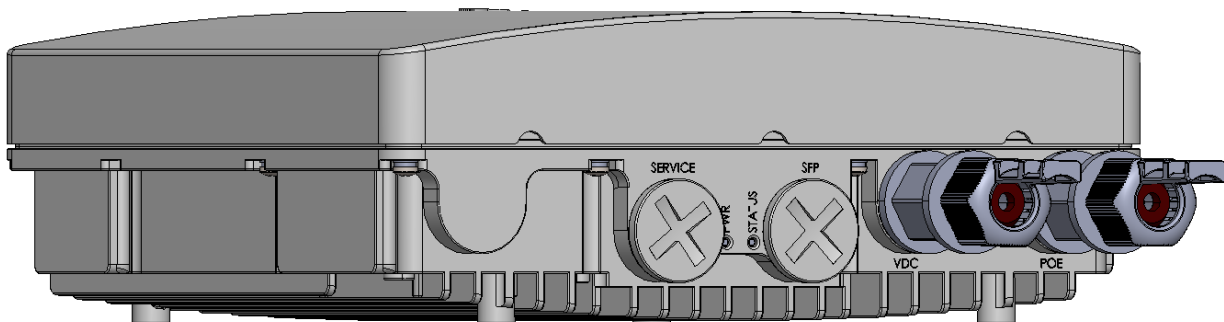
DC PWR+ETH Connection

A. DC PWR Connection

1. Insert the power 2 cord cable through the gland and connect the 3 cords according to following sketch
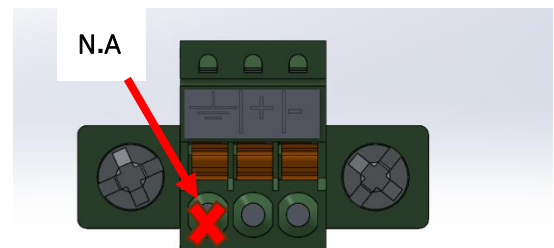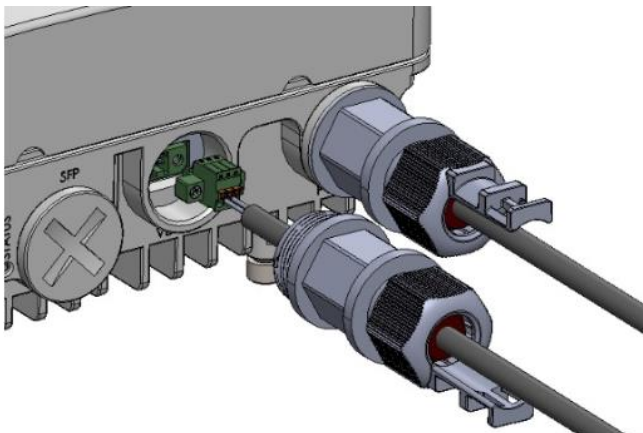
2. Connect the connector and secure it with 2 screws
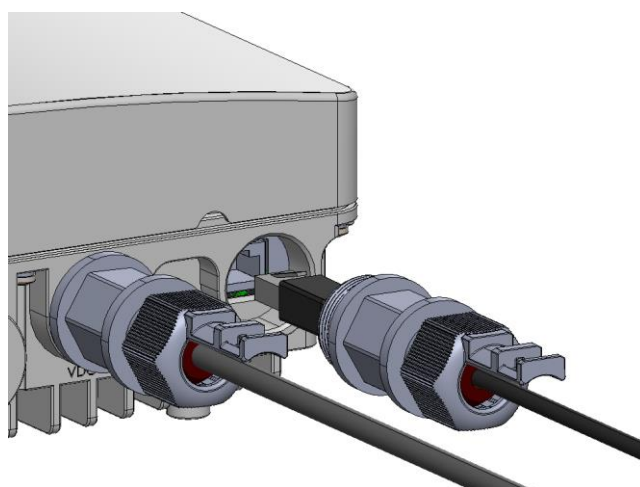
3. Tighten the gland
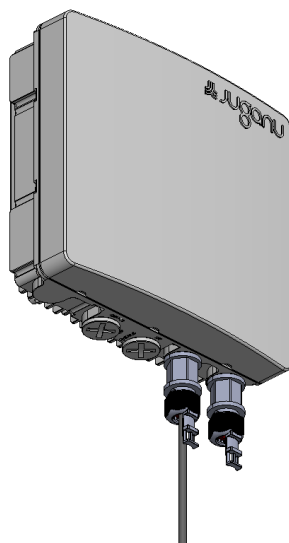
B. Ethernet RJ45 Connection

1. Make sure the cable is Cat5e or above.

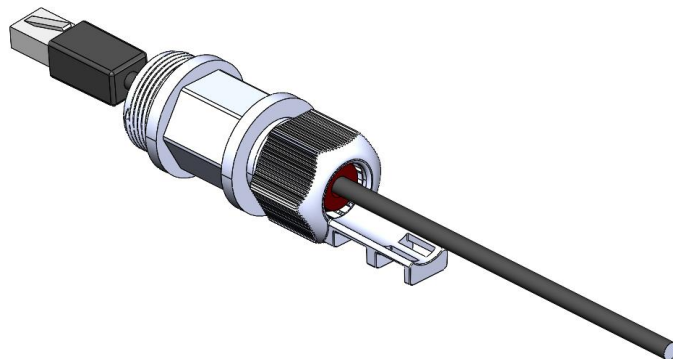2. Insert the Eth cable through the gland
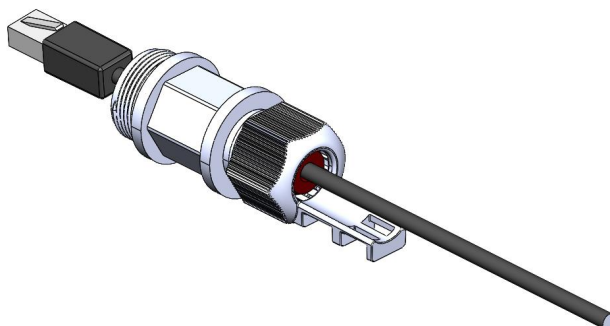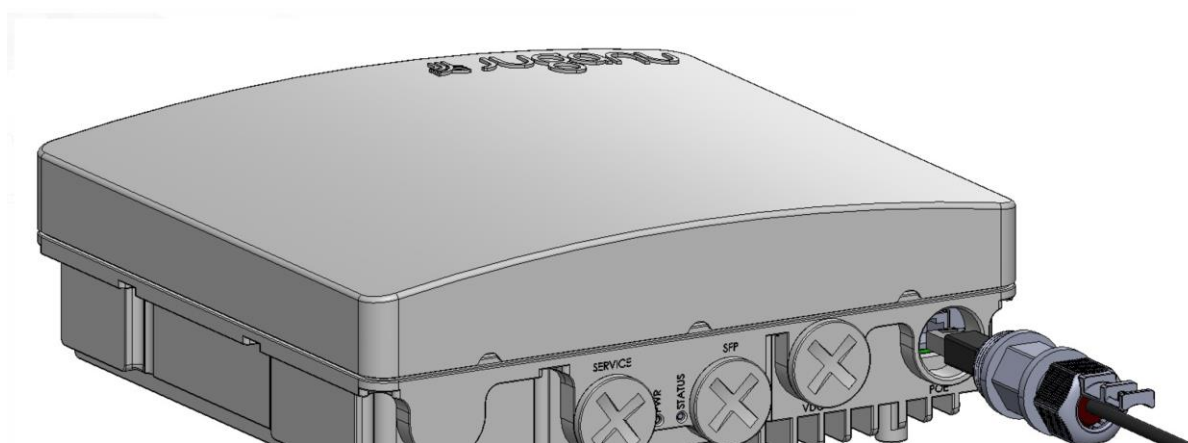

3. Connect the Eth Connector to the port

4. Tighten the Gland

PoE Connection

1. Insert the PoE cable through the gland

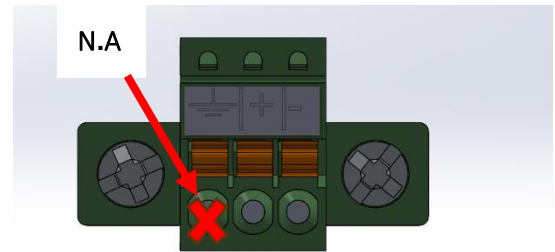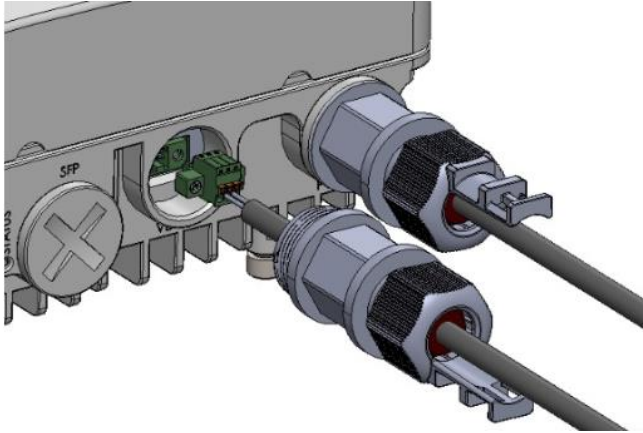2. Connect the PoE Connector to the port

3. Tighten the Gland

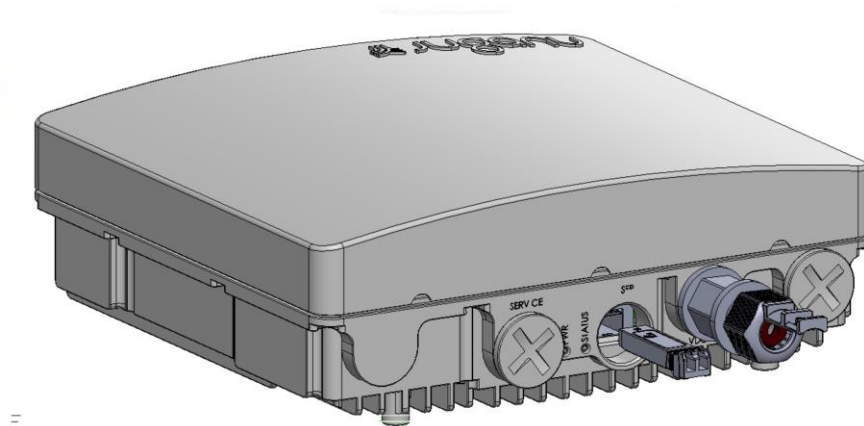## DC PWR+SFP Connection

C. DC PWR Connection

4. Insert the power 2 cord cable through the gland and connect the cords according to following sketch
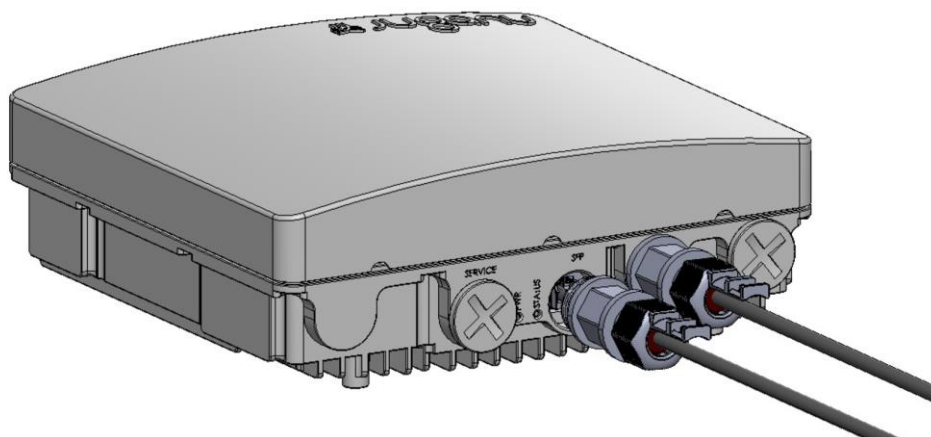

N.A

5. Connect the connector and secure it with 2 screws

6. Tighten the gland

A. SFP connection

1. Plug the SFP device to its port
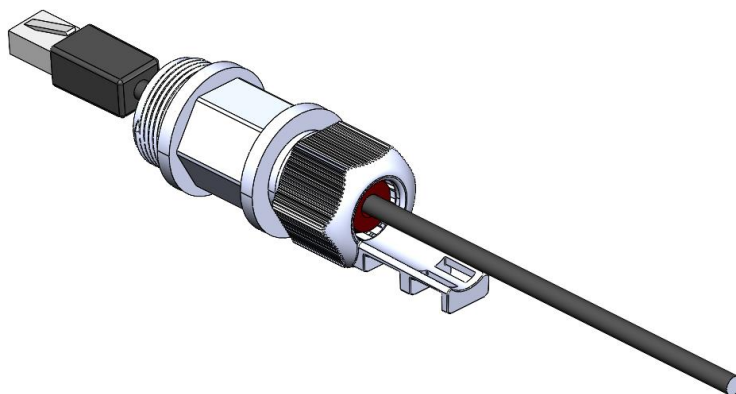

2. Thrill the optic cable through the gland

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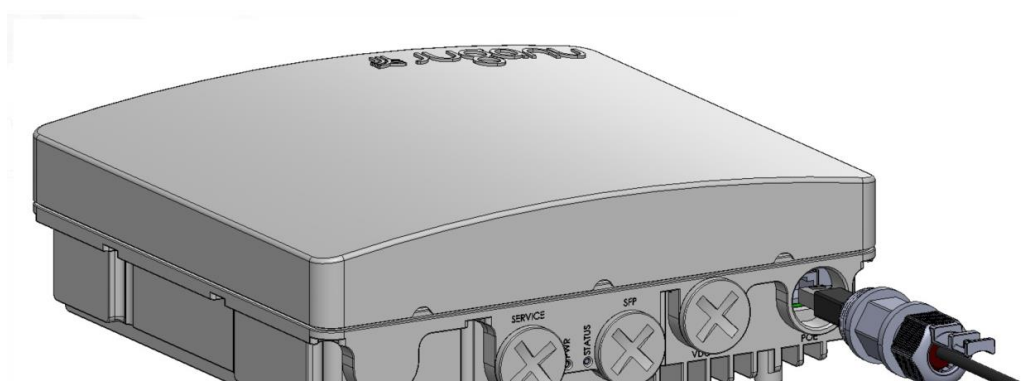3. Tighten the Gland

PoE (power only with no data) + SFP

A. PoE Connection

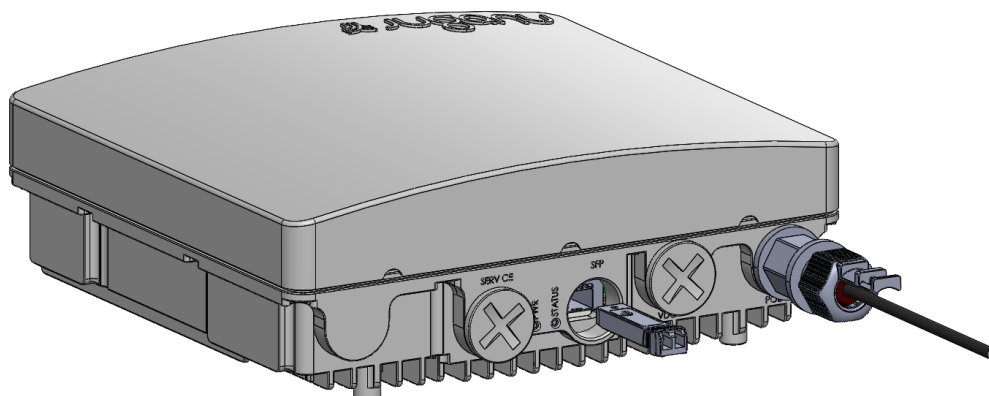   1. Insert the PoE cable through the gland

    2. Connect the PoE Connector to the port
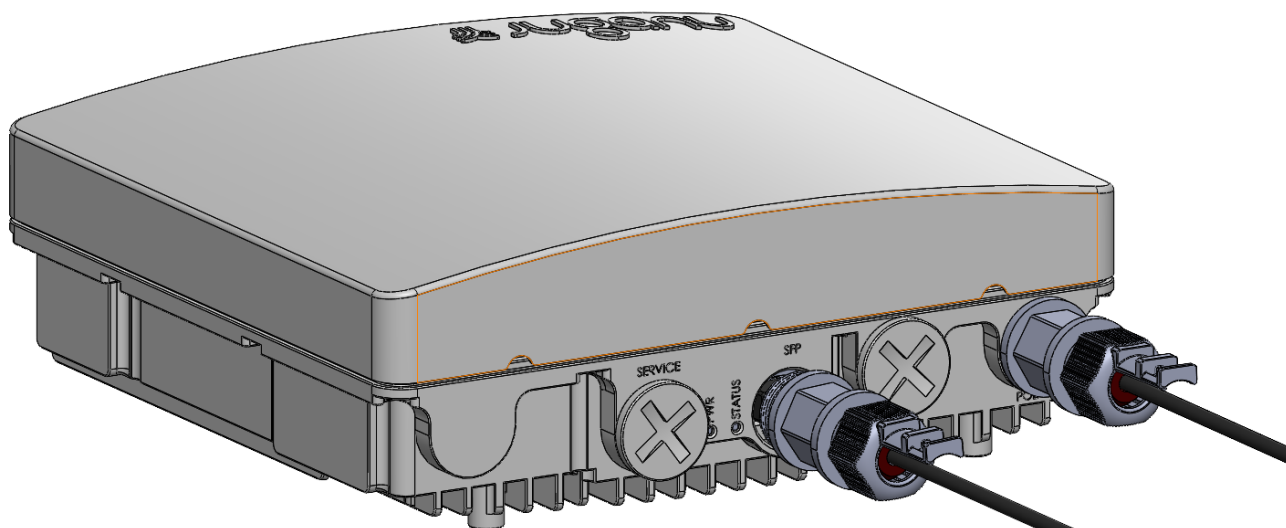
    3. Tighten the Gland

B. SFP connection

    1. Plug the SFP device to its port

2. Insert the optic cable through the gland

3. Tighten the Gland

Setup and Configuration

Coordinate with the Juganu Customer Success team to connect the CAP to the Juganu Lighting Management System (LMS).