This installation guide is applicable to SkyEdge II-c Capricorn S2X Outdoor CPEs with an internal power adapter.

To install the SkyEdge II-c CPE, the installer must:

- Be trained in the installation of the SkyEdge II-c Capricorn S2X Outdoor CPE
- Have the CPE configuration parameters available

Unpacking Guidelines

1. Unpack the unit and its accessories.
2. Compare with the supplied BOM and verify that nothing is missing.
3. Verify that nothing is damaged.

Marking explanation:

GROUNDING MARK.

Capricorn Outdoor CPE General Information

VSAT AC and DC power supplies are provided by Gilat. If the power to the VSAT is not through an AC or DC adaptor (e.g., batteries, solar panels, rectifier ETC), the power solution must be approved by the Gilat Technical Support.

WARNING

- **Before installing the unit, verify that the antenna and DC power cord are grounded to provide protection against voltage surges and static charges.**
- **Please note that the output to the BUC can be either 24v or 48v, depending on the model.**
- **Section 810 of the US National Electrical Code, ANSI/NFPA 70, and Section 54 of the Canadian Electrical Code provide information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.**

The Capricorn Outdoor CPE contains 4 LAN ports and uses a DC input of 48V.

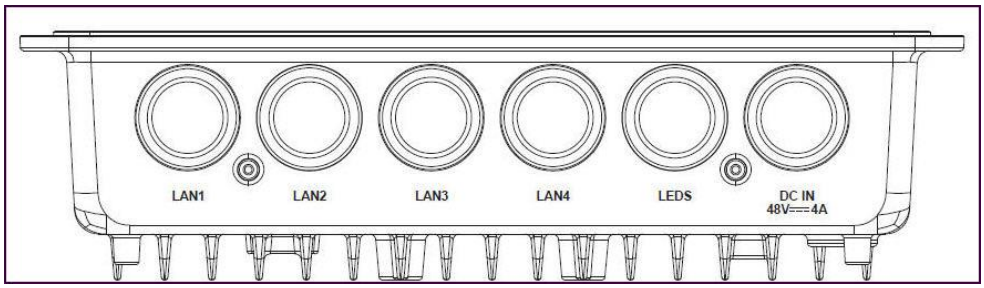


Figure 1: Front Panel

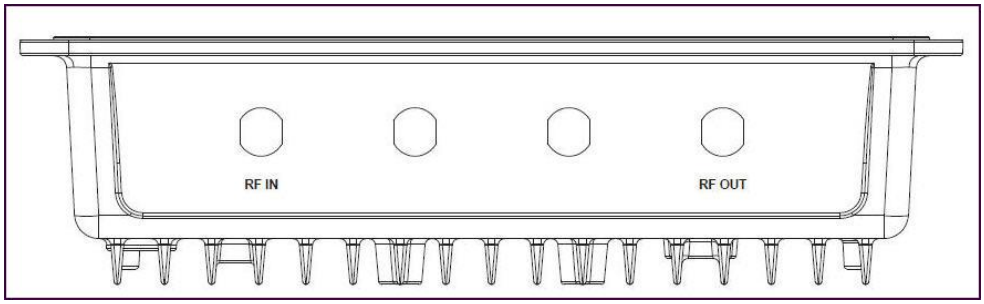


Figure 2: Rear Panel

Preparing for Installation

CAUTION

The CPE is intended for RESTRICTED ACCESS LOCATION (RAL) only.

CAUTION

The CPE and RF output device BUC shall be installed or mounted on non-flammable materials.

CAUTION

- The CPE must be grounded prior to installation by attaching one end of the grounding cable to the grounding stud on the front of the CPE, and the other end to the site main ground connection. 14AWG grounding cable should be used.
- The CPE must be configured prior to attaching the RF cables.
- The power cable must be disconnected from the CPE prior to connecting the RF cables.

CAUTION

To prevent damage to the RF Connectors, secure the cables to a permanent, static object such as a table or pipe, at a distance of 25-60 cm (10-25 in.) from the CPE, prior to connection.

Connecting the RF Cable

1. Connect the two RF cables, from the LNB and ODU, to the **RF-IN** and **RF-OUT** connectors respectively, using a recommended torque of 13 lbft/in (1.5 N/m).
2. Use only the RF cables (RG6 or RG11, depending on the BUC), 18AWG, F-type connector approved by Gilat.

Connecting the Grounding Cable

Connect the grounding cable (GND) from the CPE to the approved site ground stud, marked ⏚. Gilat recommends using the AWG 14 cable.

Connecting the LAN Cable

The unit is supplied with a single LAN adapter connected to the unit, and an additional 3 adapters in the installation Kit.

To install more than one LAN cable, remove the cap from the LAN connector and connect the additional adapter.

All LAN ports must either be covered with the suitable cap or have a cable connected to them.

Do not leave a port uncovered, as it will cause damage to the unit.

- Be sure to keep the additional adapters in a safe place for future use.
- Use only outdoor LAN Cat-5E type cables to connect to the LAN port.
- Use only the LAN cable approved by Gilat.

Connecting the Power Cable

An accessible two pole circuit breaker (Rated 4A) must be provided in the building for the DC power feed source.

- Use the connector that was supplied and approved by Gilat.
- The connection will be: Pin 2 to"-", Pin 1 to "+".
- Be sure to use the outdoor cable 16AWG.

Use the Outdoor Power Cable with the following parameters:

- **Outdoor cable supporting temperatures from -40 + 60°C**
- **Max OD 8 mm**
- **Cable wires Stranded**
- **Conductor Range: 14-18AWG**

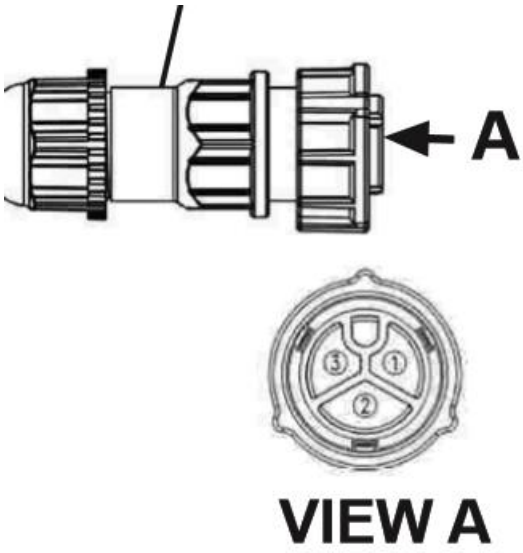


Figure 3: Power Cable

LED Display

- **Power ( )**
  - Off – power off
  - On – power on
- **Satellite Network ( )**
  - Off – no RX signal
  - Blinking – Signal received, not synchronized
  - On – Signal received, synchronized
- **Link Status (@)**
  - Off – no link
  - Blinking – link up, limited service (authorization)
  - On – link up, full service
- **User Traffic TX ( )**
  - Off – idle, no traffic
  - Blinking – transmitting user traffic
- **User Traffic RX ( )**
  - Off – idle, no traffic
  - Blinking – receiving user traffic

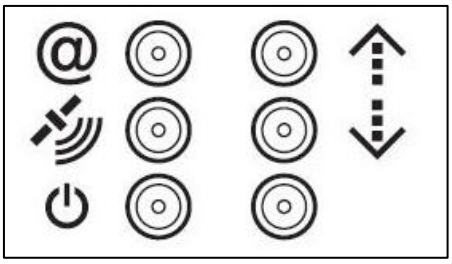
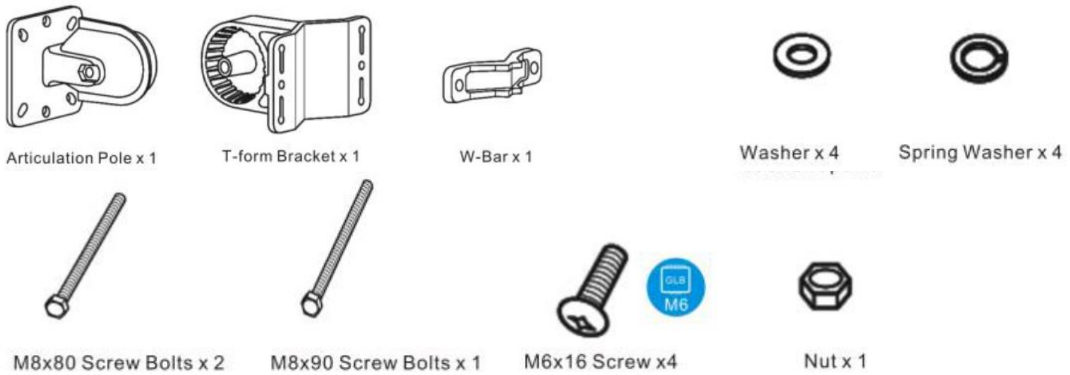


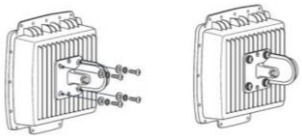
Figure 4: LED Panel

Mounting Installation Guide

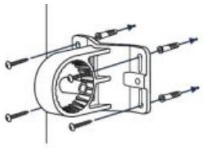
The following items are provided with the mounting kit:



Installing the Enclosure on the Articulation Pole
Attach the articulation pole to the back of the GLB using M6x16 screws and washers.

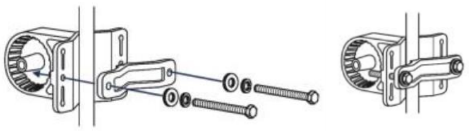


Wall Mounting
Fix the mount base to the wall using wood/gyprock screws.

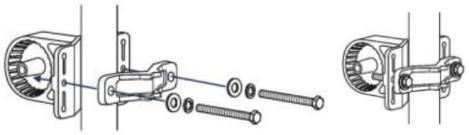


Pole Mounting

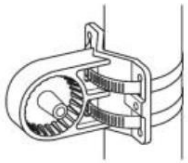
Mounting for a pole less than 1.5" (35mm)
Attach the mount base and W-bar to the pole as shown using M8x80 bolts and washers.



Mounting for a pole larger than 1.5" (35mm) and under 3" (80mm)
Attach the mount base and W-bar to the pole as shown using M8x80 bolts and washers**.**



Mounting for a pole larger than 3" (80mm)
Fix the mount base to the pole using the stainless tie back straps**.**



Installing the Enclosure on the Pole
Attach the articulation pole to the mount base articulation using a M8x90 bolt, nut and washers