
## Product Overview

C-Bridge is a Casambi-enabled lighting and building-control gateway designed to integrate wireless Casambi networks with IP-based systems, dashboards, and third-party integrations tools.

C-Bridge supports local control, monitoring and reporting while acting as a central hub for lighting, sensors, and automation workflows.

## Features & Highlights

**Customizable Dashboard**
C-Bridge offers a flexible dashboard you can tailor to your building and workflows. View lighting, sensor, occupancy and other metrics on a web-based, easy to view, customizable dashboard.

**API Integrations**
C-Bridge includes API access for integrating with third-party platforms and custom software. This enables automation, dashboards, reporting and integrations with tools already used in your building or organization.

**Exportable Reports**
C-Bridge can generate exportable reports for sharing performance, usage, and system insights. Useful for facility teams, audits, stakeholders.

**Energy Monitoring**
CBridge tracks energy-related metrics to help you understand usage trends and identify opportunities to reduce consumption. It supports better operational decisions and efficiency planning.

**BACnet Compatible**
Native BACnet to connect lighting control data to building management systems (BMS). This makes it easy to monitor and control key lighting functions from the same platform used for HVAC, security, and other building systems.

**Alerts & Activities**
CBridge provides real-time alerts and a clear activity history so teams can see what changed, when it changed, and who or what triggered it. This helps with troubleshooting, accountability, and keeping operations running smoothly.

**Custom User Privileges**
CBridge lets you assign roles and permissions so each person gets the right level of access, from full admins to limited users. This keeps control organized and reduces the risk of accidental or unauthorized changes.

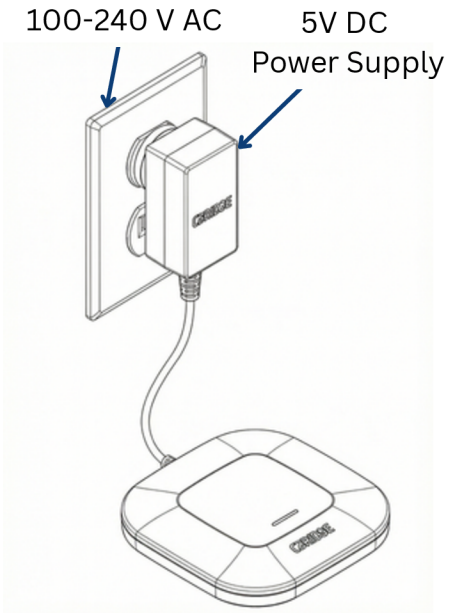
# Installation

## Power

C-Bridge is powered using the included 5V / 5A external power supply. The power supply is designed for international use and includes interchangeable plug adapters compatible with common electrical receptacles worldwide.
Before installing C-Bridge, ensure a properly grounded AC receptacle is available near the installation location. The receptacle must comply with local electrical codes and regulations. If a suitable receptacle is not already available, installation of an approved outlet should be performed by a licensed electrician in accordance with all applicable electrical standards.

To power the device:

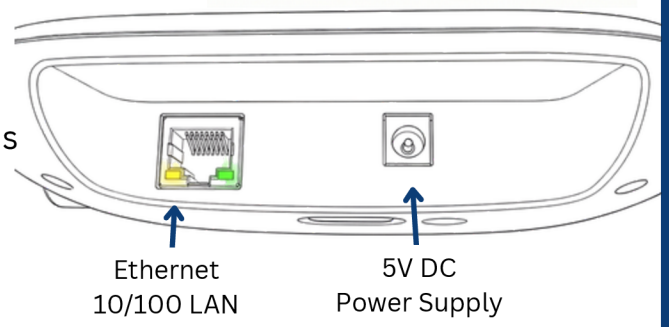
- Connect the DC output connector of the supplied power adapter to the 5V power input on the C-Bridge unit.
- Attach the appropriate regional plug adapter to the power supply.
- Plug the power supply into the approved AC outlet.
- Once connected, the status LEDs on the C-Bridge unit will illuminate, indicating the device is receiving power and beginning its startup sequence.




## Ethernet

C-Bridge connects to the building network using the Ethernet LAN port located on the rear of the device. The Ethernet port supports 10/100 Mbps networking and provides the primary communication path for:

- Accessing the C-Bridge web dashboard
- Communicating with local network devices
- Sending data to remote services or cloud integrations
- System configuration and firmware updates




Connection steps:

1. Connect a standard Ethernet cable (Cat5e or better) to the Ethernet LAN port on C-Bridge.
2. Connect the other end of the cable to a network switch, a router, or the building's local LAN infrastructure.
3. When connected successfully, the Ethernet port LEDs will indicate network activity.

For reliable operation:

- Use a wired Ethernet connection rather than Wi-Fi.
- Connect the device to a stable LAN with internet access if cloud services are required.

# Installation

## Product Placement

For optimal wireless performance, C-Bridge should be installed in a location that provides strong and reliable communication with the Casambi wireless network.

The preferred installation location is ceiling mounted near the center of the Casambi network coverage area. Installing the device centrally helps ensure consistent communication with all Casambi nodes and improves overall network reliability.
Casambi networks use Bluetooth Low Energy (BLE) mesh communication, so the physical location of the gateway can directly impact connectivity and performance.

Recommended Placement

- Install on the ceiling whenever possible
- Position the device near the center of the Casambi network
- Ensure the device has clear wireless paths to nearby luminaires or nodes
- Maintain reasonable proximity to multiple Casambi devices to allow the mesh network to relay communication effectively

Central placement improves signal propagation and reduces the likelihood of communication delays or dropped messages. If ceiling mounting is not possible, C-Bridge may also be installed on a wall, inside an IT or network closet or in proximity of existing network equipment.
These locations are acceptable as long as the device can still maintain strong wireless communication with the Casambi network.

When installing in these locations:

- Avoid areas surrounded by metal enclosures, electrical panels, or dense construction materials
- Ensure the device is not isolated from the Casambi network by thick walls, mechanical rooms, or elevator shafts
- Verify that nearby Casambi nodes remain within reliable Bluetooth communication range

General Installation Guidelines

- Install in a dry indoor environment
- Avoid locations with excessive heat, moisture, or vibration
- Maintain adequate space for Ethernet and power connections
- Ensure the device remains accessible for service and maintenance

Proper placement of C-Bridge ensures stable communication with the Casambi network and helps maintain reliable lighting control across the installation.

# Installation

## Mounting

C-Bridge can be mounted to a wall or ceiling using the included  bracket, screws, and anchors.

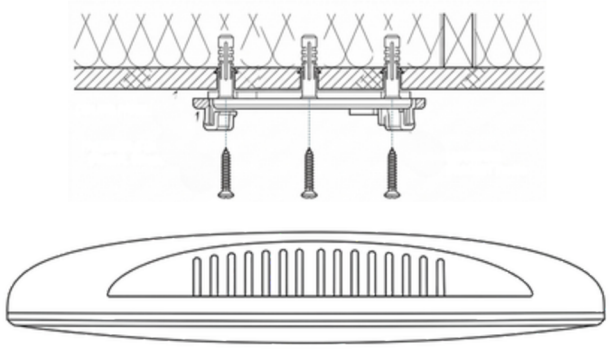
Installation Steps:

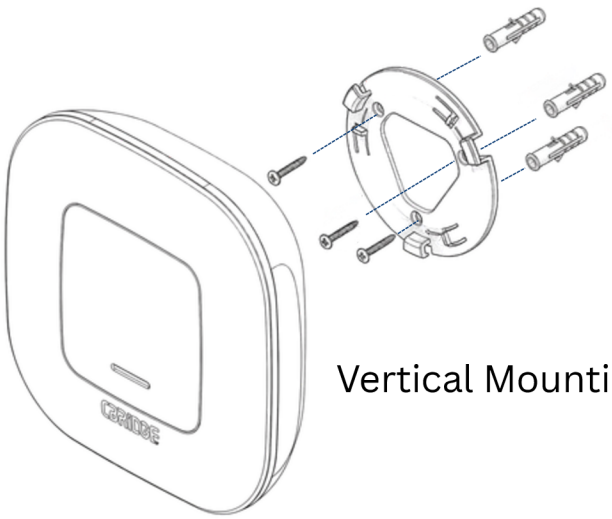
1. Position the mounting bracket at the desired installation location. Using the provided screws and wall anchors, securely fasten the bracket to the wall or ceiling surface.
2. Ensure the bracket is firmly mounted and level before attaching the device.
3. Align the three mounting slots on the back of the C-Bridge, which are designed to engage with the three clips on the bracket.
4. Align these slots with the clips on the installed bracket.
5. Once aligned, press the C-Bridge gently against the bracket and rotate the device clockwise until it locks into position.
6. Confirm proper installation: the device will click into place and sit flush against the bracket.

Installation Tips

- Ensure all mounting hardware is fully tightened before attaching the device.
- Do not overtighten screws, which may damage the mounting bracket or wall surface.
- Leave sufficient space around the unit to allow access to the Ethernet and power connections.

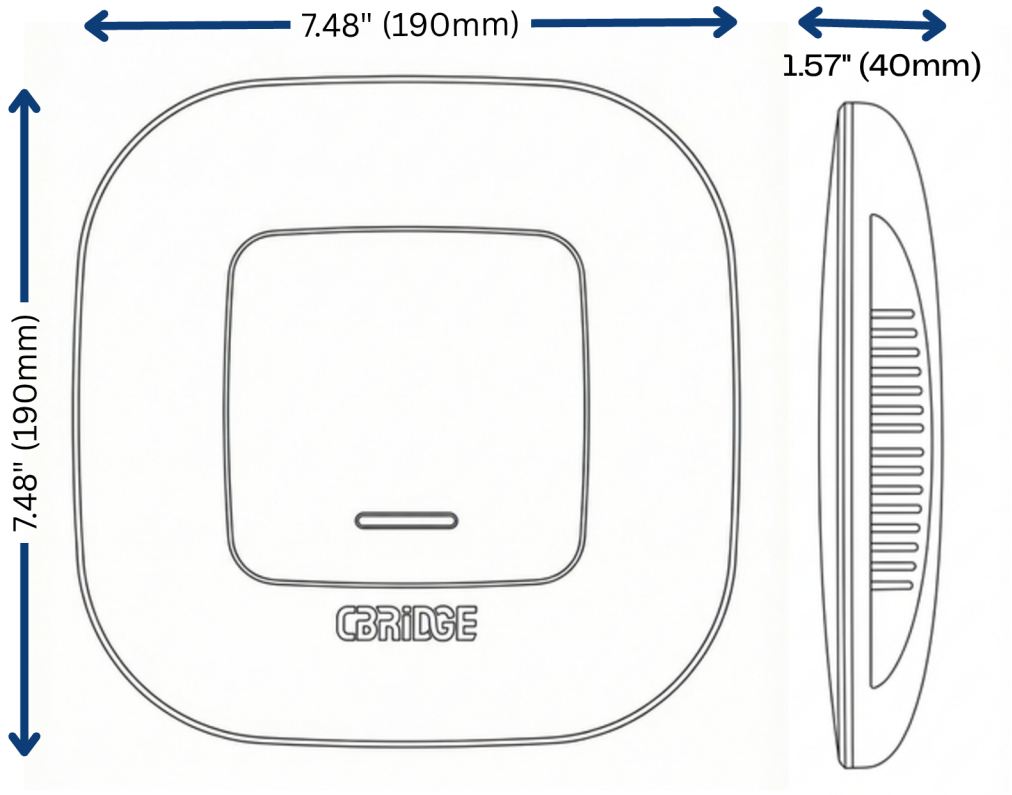
Ceiling Mounting





Vertical Mounting

## Hardware Details

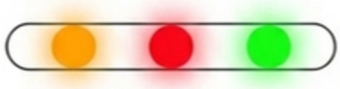



## Ordering Information

- Default product is CBI-508-V2-X-CPS unless custom ordered

| Model | HW | Rev | Variant | Type |
|---|---|---|---|---|
| CBX | 508 | VX | XX | CPS |

## LED Indicators



- Green LED: Power
- Red LED: Internet Connection
- Orange LED: Casambi Communication

## Product Support

- Visit www.CBridge.cloud for product support, warrenty information, FAQs and technical assistance.

- Email:
- For tech support: support@cbridge.cloud
- For sales/warranty: info@cbridge.cloud

## Technical Specifications

| Power | |
|---|---|
| **Input Voltage (AC power supply)** | 100-240 V AC, ~50/60 Hz 0.8 A |
| **Hardware Input (DC barrel jack)** | 5 V DC , 5A |
| **Processor** | Broadcom BCM2712 Quad-Core ARM Cortex-A76 |
| **System Memoery** | 4GB or 8GB LPDDR4X RAM |
| **Local Storage** | 16, 32 or 64 GB (application data) |
| **Bluetooth** | Casambi BLE (2.4 GHz Bluetooth Low Energy) |
| **Frequencies** | 2.402 – 2.480 GHz |
| **BLE TX Power** | Up to +8 dBm |
| **Ethernet** | RJ-45 Ethernet |
| **Wi-Fi** | Wi-Fi 802.11a/b/g/n/ac (2.4/5 GHz) |
| **Mechanical** | |
| **Operating Temperature** | -10°C to 50°C (14°F to 122°F) |
| **Hardware Dimensions** | 7.48" x 7.48" x 1.57" (190x190x40mm) |
| **Weight** | 10.4 oz (295g) |
| **Operating Temperatures** | 32°F - 104°F (0°C - 40°C) |
| **Storage Temperature** | –4°F - 140°F (–20°C to 60°C ) |
| **Mounting** | Wall, Ceiling, Rack |
| **Indicator LEDs** | Red, Orange, Green |
| **Warranty** | 5 years |
| **Compliance** | FCC, CE, RoHs, UL power supply |

## Document Revisions

| Version | Date | Comment |
|---|---|---|
| **1.0.0** | 01/2026 | Initial release |
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