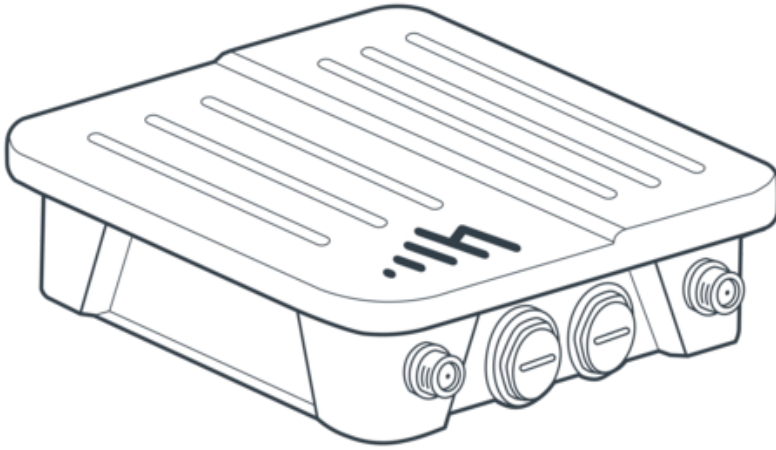


W1855 Series 5G Wideband Adapter Quick Start Guide



Introduction

This document provides a brief overview of the Cradlepoint W1855 Series 5G Wideband Adapter, discusses what's inside the box, and provides basic set up and installation instructions.

Intended Audience

This article is intended for professional networking hardware installers. It provides basic knowledge and should be used only as a reference guide for installing the Cradlepoint W1855 Series 5G Wideband Adapter. Due to the unique nature of each installation, potential for RF exposure, and enhanced separation requirements, customers must have a professional install their 5G hardware. This guide is intended only to provide best practices. Refer to the [Cradlepoint Product Disclaimer and Limitation of Liability Disclaimer](#) section for further information.

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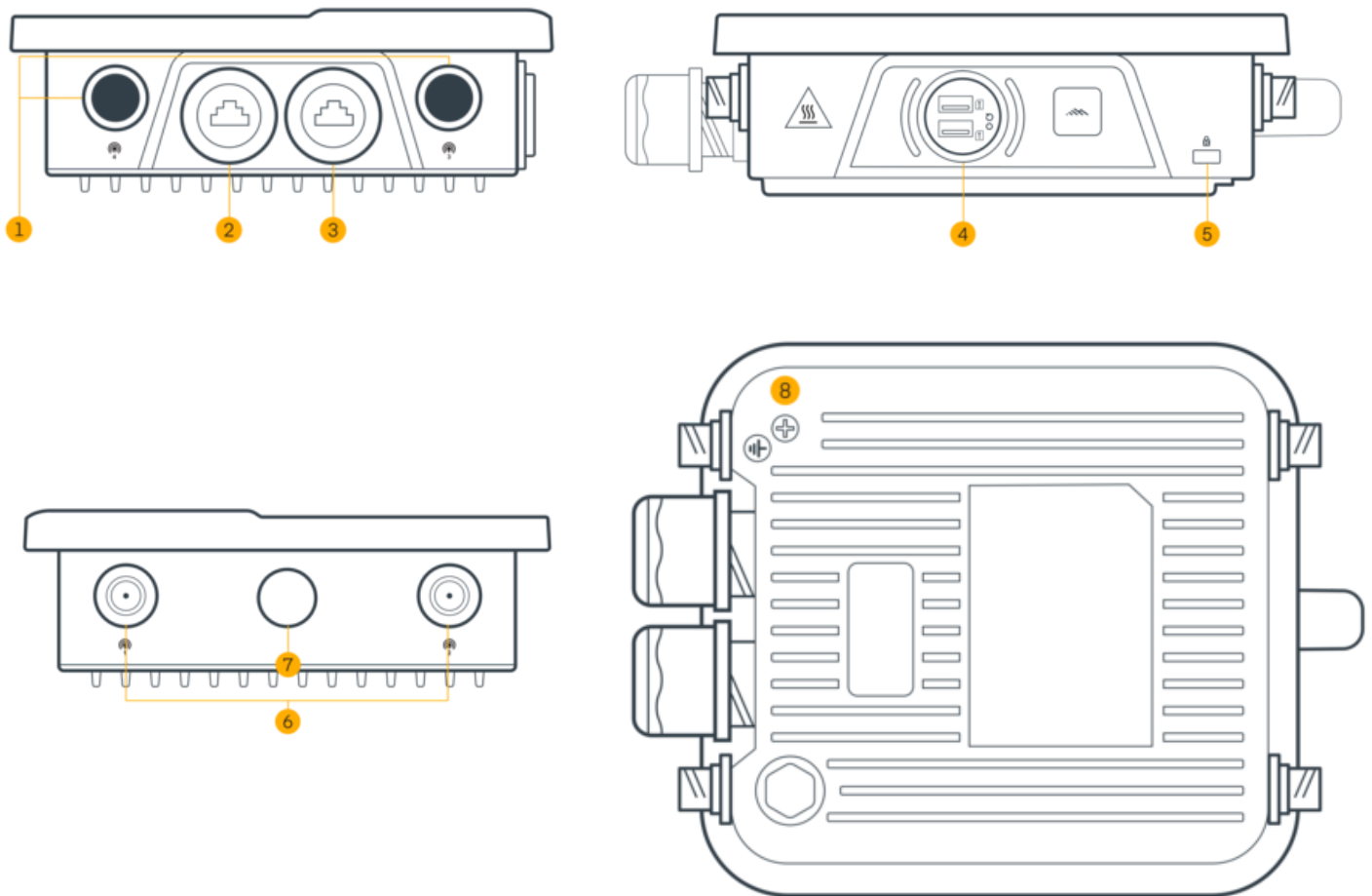
Available Models

This guide applies to the following products:
CRADLEPOINT W1855-5GC MODEL: S5A312A

Before You Begin

Read the following before setting up your Cradlepoint W1855 Series 5G Wideband Adapter.

External Device Components



- 1 Cellular Antenna Connectors (N-type sockets) - shipping covers shown (2 of 4)
- 2 2.5 GbE PoE Ethernet Port
- 3 2.5 GbE Ethernet Port
- 4 SIM Slots (cover shown removed)
- 5 Kensington Lock Port

- 6 Cellular Antenna Connectors (N-type sockets) - covers not shown (2 of 4)
- 7 Bluetooth Antenna
- 8 Grounding Connector

Location Considerations

The Cradlepoint W1855 Series 5G Wideband Adapter is purpose-built for exterior mounting and should be installed by a professional. The following includes considerations when identifying a location for mounting.

- Ensure that the mounting surface clear of any obstructions or objects that may interfere with the antennas, signal reception, or cables.
- Position the device for optimal signal reception.
- Ensure plenty of airflow for ventilation.
- For the adapter to maintain its rating against hurricane force winds (up to 137mph sustained), the following must be met when pole mounted:
 - The pole must be trade size schedule 40 pipe, rigid conduit (steel or aluminum), or EMT pipe that is at least 1.5" outside diameter (OD). The use of larger OD pipe is supported but requires customer supplied hose clamps (included hose clamps support 1.5" – 2.5" OD pipe).
 - The height of the pole above the anchor point can be no higher than 10 feet.
- For more information refer to the Safety, Regulatory, and Warranty Guide insert that came with your device.

IMPORTANT: The W1855 Series 5G Wideband Adapter requires increased separation distances in relation to other networking hardware. Therefore, Cradlepoint recommends that all 5G adapters be installed by a professional. For assistance with installation or in locating a professional installer, contact Cradlepoint [Sales and Support](#).

Ethernet Cable Considerations

Cradlepoint recommends shielded twisted-pair (S/FTP) Ethernet network cabling and connectors (Cat5/Cat6/Cat6a/Cat7a) for optimal wired network performance.

SIM Card Setup for Wireless Connectivity

A wireless broadband data plan must be added to your adapter for wireless broadband connectivity. Network providers must provision a SIM to provide wireless broadband data plans compatible for use with Cradlepoint W1855 Series 5G Wideband Adapters. Contact your network provider for further details.

Setup

The following steps provide general setup instructions.

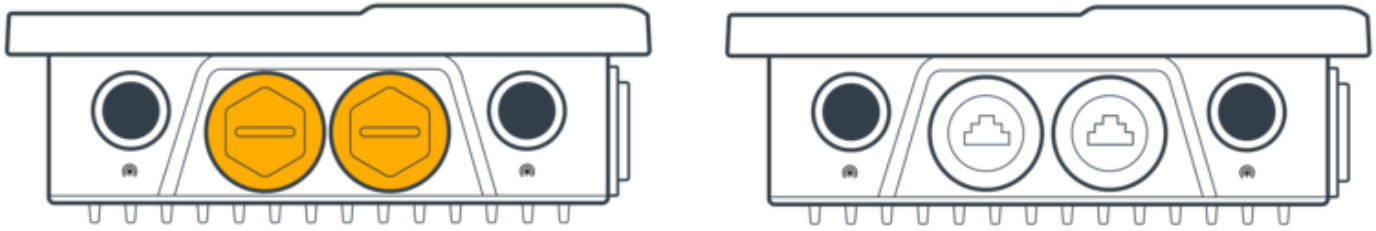
Prepare tools and adapter for installation

WARNING: When connecting this equipment (with or without power over ethernet supplied) to devices that are mounted on the exterior of the building, it is recommended to include proper lightning protection (not included in box) to prevent damage to the equipment.

The following tools are needed to complete the installation, depending on your selected installation site:

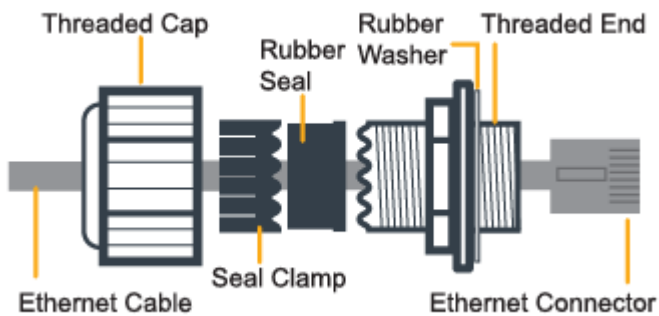
- Flat bladed screwdriver (for removing dust covers and for pole clamps)
- Socket set and driver (for pole clamps)
- Drill and drill bit (for exterior wall mounting)

Prepare the adapter for Ethernet cable connection by unscrewing and removing one or both Ethernet port dust covers, depending on your planned installation. Choose the easiest time for you during the installation to attach the cable glands.



[Installing Cable glands](#)

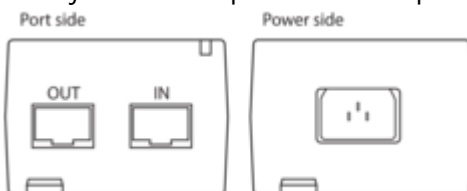
Attach the cable glands to Ethernet cables *without* protective boots:



1. Remove the threaded gland cap, rubber seal and seal clamp from the assembled cable gland.
2. Slide the threaded gland cap onto the Ethernet cable.
3. Slide the seal clamp over the Ethernet cable, and then press the Ethernet connector through the rubber seal.
Ethernet cables that include protective boots will not work with this type of cable gland.
4. Slide the Ethernet cable through the threaded end of the cable gland.
5. Fit the rubber seal back into the seal clamp, and then slide the rubber seal and clamp into threaded end of the cable gland.
6. When ready, screw the threaded end of the cable gland into the threaded socket over the Ethernet port. Tighten so that the rubber washer is firmly engaged against the outside of the W1855.
7. Slide the threaded cap over the assembly and tighten it to firmly clamp the rubber seal around the Ethernet cable and protect against the elements.

[Connecting the PoE Injector](#)

If you plan on using the included PoE injector, install it inside the building and make sure that the connections are protected against lightning. Connect a WAN cable to the PoE injector's IN port, and run an Ethernet cable from the PoE injector's OUT port to the adapter's installation site.



When you are ready to power the PoE injector, attach the power cable and then plug the other end into a power source.

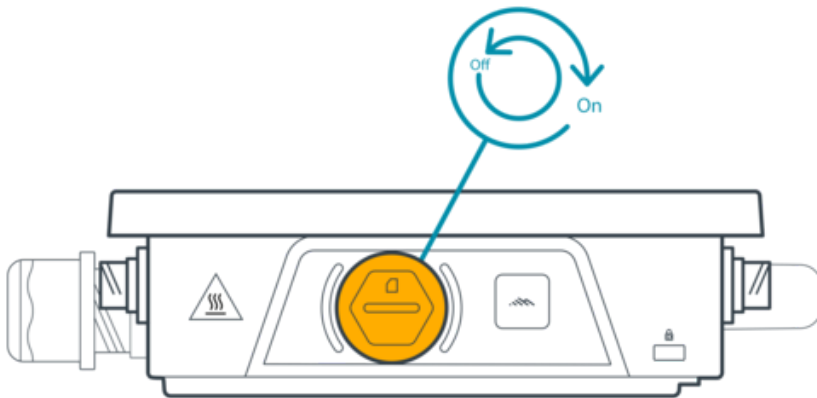
STEP 1: Check box contents


Check that the following was shipped in the box:

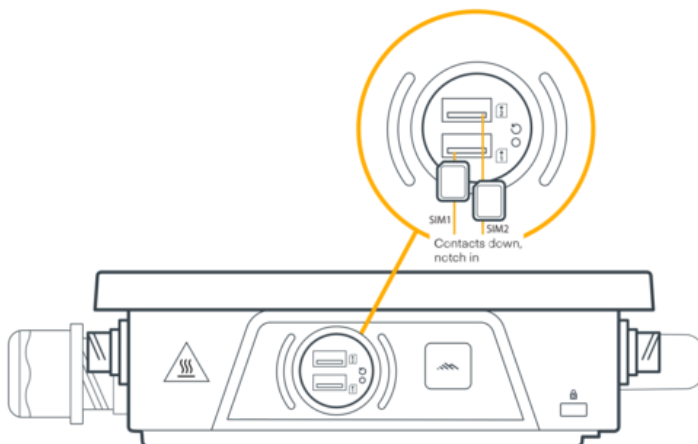
- [1] Cradlepoint W1855 Series 5G Wideband Adapter
- [4] Outdoor Sub 6 GHz 5G/LTE antennas
- [1] Outdoor mounting backplate
- [1] Outdoor mounting bracket
- [2] Pole mount clamps (attached to mounting assembly)
- [4] Backplate to adapter mounting screws
- [4] Wall anchors and wall mount screws
- [2] Cable glands
- [1] PoE injector and PoE injector power cable
- [1] Grounding lug
- [1] Safety, Regulatory, and Warranty guide
- [1] Quick Start reference sheet

STEP 2: Insert an activated 4FF-sized SIM

1. Unscrew and remove the SIM cover of the W1855 Adapter.



2. Insert a 4FF-sized SIM into the slot marked  with metal contacts down and notch in. Press the SIM in until it clicks into place.



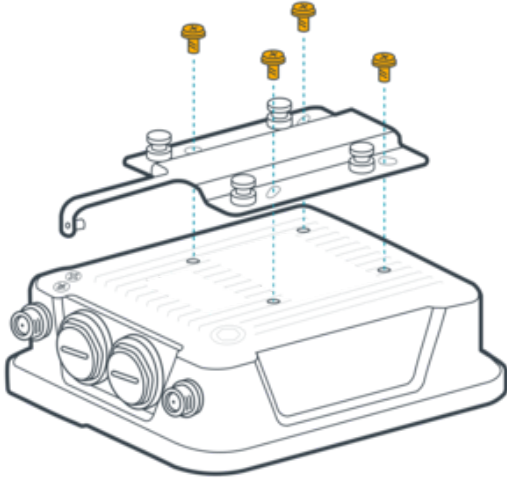
To remove it, depress the SIM until it clicks and slide out a short way, and then slide it out of the slot.

3. (OPTIONAL) Insert a second 4FF-sized SIM into the slot marked  for secondary/backup.

4. Replace the SIM cover.

[STEP 3: Attach Outdoor Mounting Backplate](#)

1. Lay the adapter on a work surface, with the back facing up.
2. Align the holes of Outdoor Mounting Backplate with the screw holes on the adapter. Make sure that the extender is toward the Ethernet port side.
3. Attach the Outdoor Mounting Backplate with four screws.



[STEP 4: Install the Outdoor Mounting Bracket](#)

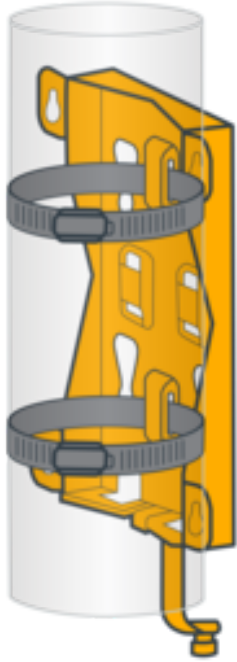
There are two methods for installing the Outdoor Mounting Bracket: Wall mounting or pole mounting.

Wall mounting


1. Remove the pole mounting clamps from the Outdoor Mounting Bracket, if needed.
2. Hold the Outdoor Mounting Bracket against an outdoor wall and mark the drill holes.
NOTE: You can place the Outdoor Mounting Bracket either horizontally or vertically.
3. Place the bracket aside, and then drill the holes with an appropriate drill bit.
4. Insert wall anchors.
5. Drive four wall mount screws into the anchors, but leave a short length of each screw protruding.
6. Hang the bracket on the screws and then slide the bracket so the narrow portion of the screw holes engage the mounting screws.
7. Tighten the wall mount screws the rest of the way.

Pole mounting

1. Open the two preinstalled pole mounting clamps using a flat head screwdriver or socket driver.
NOTE: You can install the Outdoor Mounting Bracket either horizontally or vertically. If installing horizontally, move the preinstalled pole mounting clamps to the appropriate spots on the Outdoor Mounting Bracket.
2. Wrap the pole mounting clamps around the pole at the appropriate height and then tighten the clamps.



[STEP 5: Attach antennas](#)

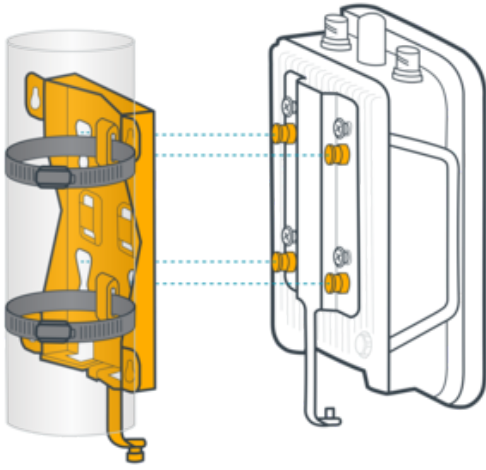
1. Remove the four covers from the SMA connectors.
2. Remove the plastic port protectors from the antennas, and slide off the cardboard sleeves.
3. Attach the four Outdoor Sub 6 GHz 5G/LTE antennas to the four SMA connectors marked .



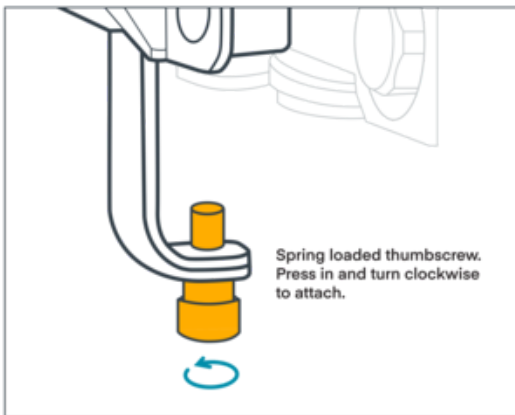
The antennas screw onto the SMA connectors. Be sure that you align the antennas carefully to avoid cross-threading the connection. Tighten until finger tight.

[STEP 6: Attach adapter to Outdoor Mounting Bracket](#)

1. Align the studs on the Outdoor Backplate with the holes on Outdoor Mounting Bracket, such that both the backplate and bracket extenders are aligned.
2. Fit the studs through the holes, and then slide the assembly so that it is locked into place. The two extenders should mate closely together. Antennas, cables, and cable glands not shown.



3. Connect the extenders with the captive thumbscrew by pressing it in and turning until it is tight.



Troubleshooting

If the adapter takes longer than 5 minutes to connect to the Internet, you may need to log into the local UI of the device to make configuration changes or start the troubleshooting process. You must be physically co-located with the adapter in order to do this. Refer to [No Internet or Connection Issues](#) for more information.

Once the adapter connects to the Internet, it should then connect to your NetCloud Manager account and start its configuration download.

Additional Resources

[W1855 Series 5G Wideband Adapter Webpage](#)

[W1855 Series 5G Wideband Adapter Data Sheet](#)

Help and Support

[Cradlepoint Customer Connect Community](#)

[Cradlepoint Support Services](#)

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