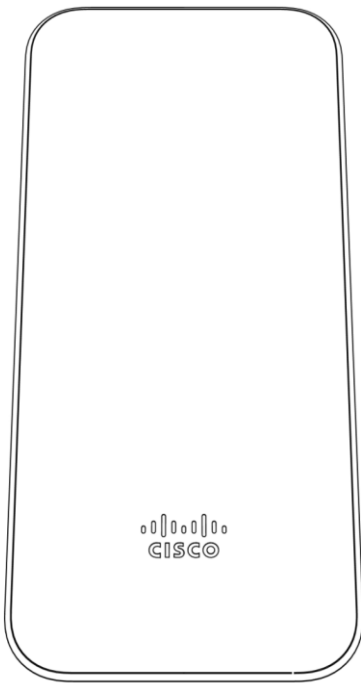# The Cisco Meraki GR60 is a dual-band enterprise class 802.11ac cloud-managed access point
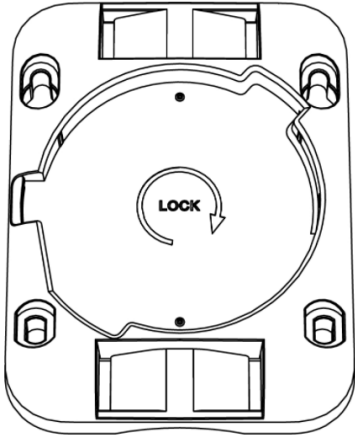
Package Contents
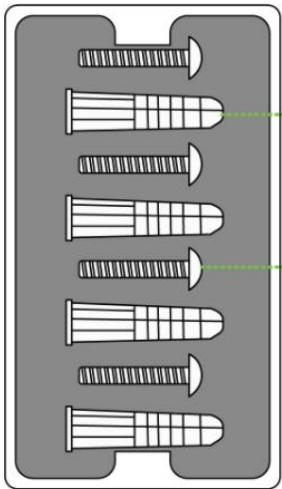
The GR60 package contains the following:

- GR60 Cloud-Managed Access Point

- Mount cradle including built-in level tool

- Mount Kit
  - Wall screws and wall screw anchors

Wall screw anchors for masonry (brick, concrete)
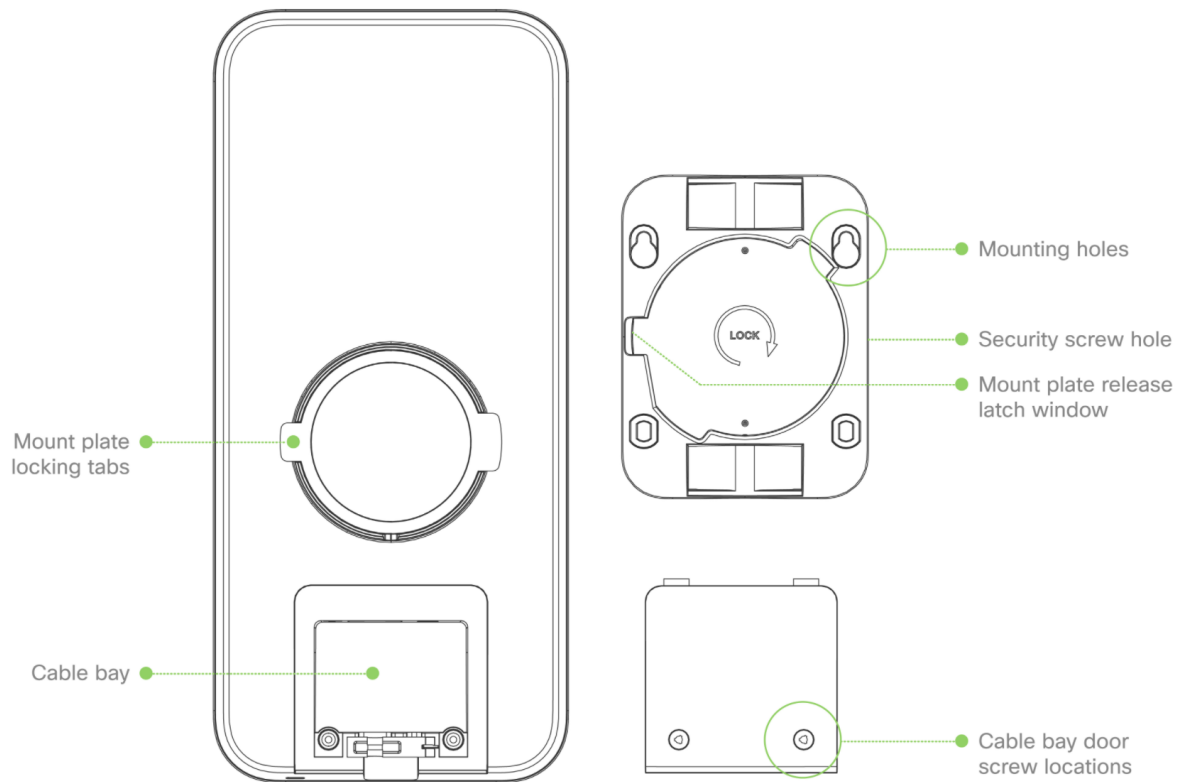
Phillips head wall mounting screws

Understanding the GR60

Your Meraki GR60 has the following features:

LED indicator

The mount cradle has the following features:

Mount plate
locking tabs

Cable bay

Mounting holes

Security screw hole

Mount plate release
latch window

Cable bay door
screw locations

Ethernet Ports

The GR60 features a Gigabit Ethernet RJ45 port that accepts 802.3at and 802.3af power (labeled "Eth0, PoE"). This port should be used for uplink to your WAN connection.

Power Source Options

The GR60 access point can be powered using either the Meraki AC Adapter, PoE Injector (both sold separately), or a third-party PoE switch.

Factory Reset Button

If the button is pressed and held for at least five seconds and then released, the GR60 will reboot and be restored to its original factory settings by deleting all configuration information stored on the unit.

LED Indicators and Run Dark Mode

Your GR60 is equipped with a multi-color LED light on the front of the unit to convey information about system functionality and performance:

- Orange - AP is booting (permanent Orange suggests hardware issue)
- Rainbow - AP is initializing/scanning
- Blinking Blue - AP is upgrading
- Green - AP in Gateway mode with no clients
- Blue - AP in Gateway mode with clients
- Blinking Orange - AP can't find uplink

The GR60 may be operated in "Run Dark" mode for additional security and to reduce the visibility of the access point. In this mode, the LED will not be illuminated. This mode may be enabled through Meraki dashboard.

Pre-Install Preparation

You should complete the following steps before going on-site to perform an installation.

Configure Your Network in Dashboard

The following is a brief overview only of the steps required to add an GR60 to your network. For detailed instructions about creating, configuring and managing Meraki wireless networks, refer to the online documentation (documentation.meraki.com).

1. Login to http://dashboard.meraki.com. If this is your first time, create a new account.
2. Find the network to which you plan to add your APs or create a new network.
3. Add your APs to your network. You will need your Meraki order number (found on your invoice) or the serial number of each AP, which looks like Qxxx-xxxx-xxxx, and is found on the bottom of the unit. You will also need your Enterprise license key, which you should have received via email.
4. Go to the map / floor plan view and place each AP on the map by clicking and dragging it to the location where you plan to mount it.

Check and Upgrade Firmware

To ensure your GR60 performs optimally immediately following installation, it is recommended that you facilitate a firmware upgrade prior to mounting your GR60.

1. Attach your GR60 to power and a wired Internet connection. See the "Power the GR60" section for details.
2. The GR60 will turn on and the LED will glow solid orange. If the unit does not require a firmware upgrade, the LED will turn either green (no clients associated) or blue (clients associated) within thirty seconds.

* If the unit requires an upgrade, the LED will begin blinking orange until the upgrade is complete, at which point the LED will turn solid green or blue. You should allow at least a

few minutes for the firmware upgrade to complete, depending on the speed of your internet connection.

Check and Configure Firewall Settings

If a firewall is in place, it must allow outgoing connections on particular ports to particular IP addresses. The most current list of outbound ports and IP addresses for your particular organization can be found [here](#).

Assigning IP Addresses to GR60s

All gateway GR60s (GR60s with Ethernet connections to the LAN) must be assigned routable IP addresses. These IP addresses can be dynamically assigned via DHCP or statically assigned.

Dynamic Assignment

When using DHCP, the DHCP server should be configured to assign a static IP address for each MAC address belonging to a Meraki AP. Other features of the wireless network, such as 802.1X authentication, may rely on the property that the APs have static IP addresses.

Static Assignment

Static IPs are assigned using the local web server on each AP. The following procedure describes how to set the static IP:

1. Using a client machine (e.g., a laptop), connect to the AP wirelessly (by associating to any SSID broadcast by the AP) or over a wired connection.
2. If using a wired connection, connect the client machine to the GR60 either through a PoE switch or a PoE Injector. If using a PoE switch, plug an Ethernet cable into the GR60's Ethernet jack, and the other end into a PoE switch. Then connect the client machine over Ethernet cable to the PoE switch. If using a PoE Injector, connect the GR60 to the "PoE" port of the Injector, and the client machine to the "LAN" port.
3. Using a web browser on the client machine, access the AP's built-in web server by browsing to http://my.meraki.com. Alternatively, browse to http://10.128.128.128.
4. Click on the "Uplink Configuration" tab. Log in. The default login is the serial number (e.g. Qxxx-xxxx-xxxx), with no password (e.g., Q2DD-551C-ZYW3).
5. Configure the static IP address, net mask, gateway IP address and DNS servers that this AP will use on its wired connection.
6. If necessary, reconnect the AP to the LAN.

Instead of associating to each Meraki AP individually to configure static IP addresses, an administrator can assign static IP addresses on the upstream DHCP server. Through "DHCP reservations," IP addresses are "reserved" for the MAC addresses of the Meraki APs. Please consult the documentation for the DHCP server to configure DHCP reservations.

Collect Tools

You will need the following tools to perform an installation:

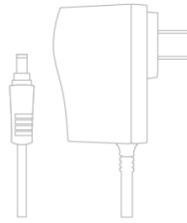| T8 Torx screwdriver	Phillips screwdriver	Hammer	Drill with ¼" (6.3mm) bits

Collect Additional Hardware for Installation

You will need the following hardware to perform an installation:

802.3at PoE power source (either PoE
switch or Meraki 802.3at PoE Injector)

AC Adapter

Network cables with RJ45 connectors long
enough for your particular mounting location

Installation Instructions

Choose Your Mounting Location

A good mounting location is important to getting the best performance out of your GR60
access point. Keep the following in mind:

1. The device should have unobstructed line of sight to most coverage areas. For
   example, if installing in an office filled with workspaces divided by mid-height cubicle
   walls, installing on the ceiling or high on a wall would be ideal.
2. Power over Ethernet supports a maximum cable length of 300 ft (100 m).
3. If being used in a mesh deployment, the GR60 should have line of sight to at least
   two other Meraki devices. A Cisco Partner can help ensure that your AP placement is
   ideal.

Install the GR60

For most mounting scenarios, the GR60 mount cradle provides a quick, simple, and flexible
means of mounting your device. The installation should be done in two steps. First, install
the mount cradle to your selected location. Then, attach the GR60 to the mount cradle
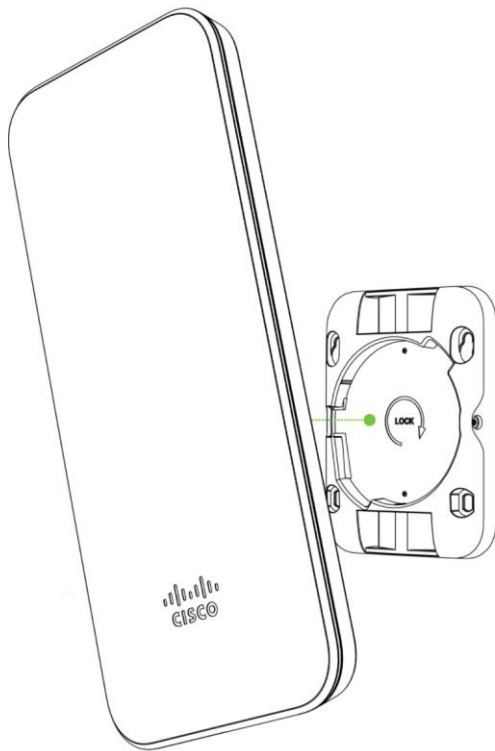
Mount the GR60

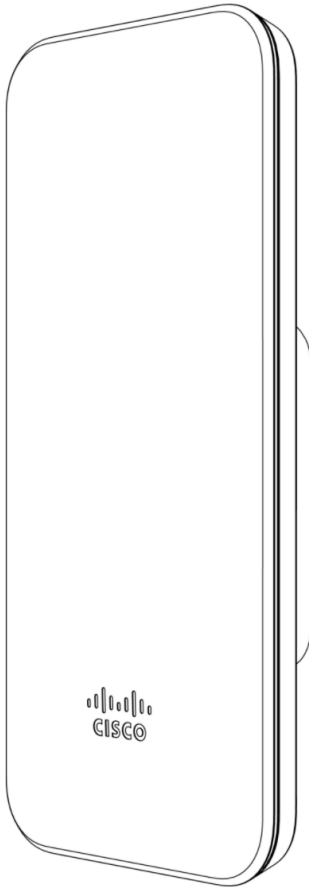## Attach the GR60 to the Mount Cradle

The GR60 attaches to the mount cradle with two tabs on the cradle that insert into the GR60, and is secured to the cradle using one screw.

To attach the GR60 to the mount cradle properly, line up the top edge of the AP with the top tab of the mount cradle. Since the cradle is already mounted to the wall, guide the GR60 towards the top tab and insert the top tab into the GR60's slot.

Then adjust the GR60 to guide the GR60's bottom slot into the cradle's bottom tab until it clicks into place. Once in place, the GR60 should be secured to the cradle by using one of the included screws in the cradle's bottom tab.

To release the GR60 from the mount cradle, first remove the security screw that secures the GR60 to the cradle's bottom tab. While holding the GR60 with one hand, press the cradle's bottom tab upwards, releasing the GR60 from the bottom of the cradle. Then remove the GR60 from the cradle's top tab.

Power the GR60

If mounting to an electrical junction box, feed the Ethernet cable through the cable access hole in the mount cradle. If mounting to a wall or ceiling, the Ethernet cable will feed from behind the GR60. The "Power Source Options" section of this document lists the different powering options and their unique characteristics.

Verify Device Functionality and Test Network Coverage

1. Check LEDs

a. The Power LED should be solid green (or blue, if clients are connected). If it is flashing blue, the firmware is automatically upgrading and the LED should turn green when the upgrade is completed (normally within a few minutes). See the "LED Indicators" section for more details. .

b. Note: Your GR60 must have an active route to the Internet to check and upgrade its firmware.

2. Verify access point connectivity

a. Use any 802.11 client device to connect to the GR60 and verify proper connectivity using the client's web browser.

3. Check network coverage

4. Confirm that you have good signal strength throughout your coverage area. You can use the signal strength meter on a laptop, smart phone, or other wireless device.

Troubleshooting

Reference the MR Product Page for additional information and troubleshooting tips.

Regulatory

This equipment is for indoor use only and the PoE device is considered unlikely to connect to an Ethernet network with outside plant routing, including campus environments.

FCC Compliance Statement

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.

FCC Interference Statement

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 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 which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

Any changes or modifications no expressly approved by Meraki could void the user's authority to operate this equipment. This Transmitter must not be co-located or operation in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IEEE 802.11b or 802.11g operation of this product in the USA is firmware-limited to channels 1 through 11.

If the device is going to be operated in the 5.15 - 5.25 frequency range, then it is restricted to indoor environment only. This device meets all other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Industry Canada Statement

This device complies with RSS-247 of the Industry Canada 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.

Ce dispositif est conforme à la norme CNR-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet 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.

Industry Canada Caution

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces

radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Industry Canada Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non con trôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.s

NCC Compliance Statement
低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

電磁波曝露量MPE標準值1mW/cm²，本產品使用時建議應距離人體 20 cm。

1. 使用此產品時應避免影響附近雷達系統之操作。

2. 高增益指向性天線只得應用於固定式點對點系統。