



MT12 Installation Guide - Water Detection

Overview

The Cisco Meraki MT12 is a cloud-managed water leak detection sensor that is exceptionally simple to configure and deploy due to its integration with the Meraki dashboard and the use of Bluetooth Low Energy technology. The MT family eliminates the complex and costly setup required by traditional solutions by removing the limitations of placement of these sensors.

Pre-Installation Preparation

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

Configure Your Network in the Dashboard

The following is a brief overview of the steps required to add an MT12 to your network. For detailed instructions about creating, configuring, and managing Meraki sensor networks, refer to the [MT - Sensors](#) online documentation.

1. Log in to dashboard.meraki.com. If this is your first time, create a new account.
2. Find the network to which you plan to add your sensor, or create a new network.
3. [Add](#) the sensors to your network. You will need your Meraki order number (found on your invoice) or the serial number of each sensor, which looks like Qxxx-xxxx-xxxx, and can be found on the back of the unit or included in the box.
4. Add the gateway (MV or MR) to the **same network** as the sensor.



WARNING:

Make sure the gateway is in the same network and is **online** and **operational**. If the sensors are powered on without a functioning gateway in the immediate vicinity, the sensors will consume power at a high rate until it finds a gateway.

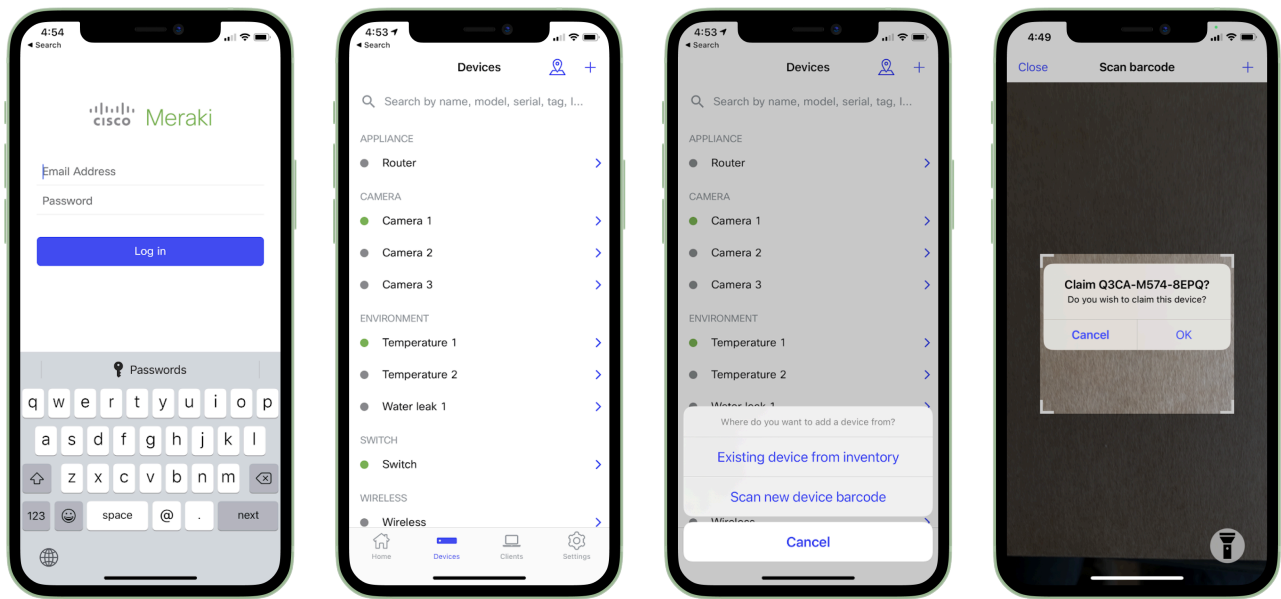
Click here for [MV setup instructions](#) and [MR setup instructions](#).

Quickly Scan and Claim Multiple Devices through the Meraki Mobile App

If you have to claim multiple devices, the quickest way is by scanning their barcode using the Meraki app.

1. Log in to your Meraki [iOS](#) or [Android](#) app with your Meraki dashboard account. [Create a new account](#) if you do not have one.
 2. Navigate to the correct [network](#) through left-side bar.
 3. Go to the **Devices** tab from the bottom navigation bar.
 4. Select the **+** icon on the top right of the screen and pick **Scan new device barcode**.
 5. Point your phone camera toward the hardware barcode to claim the device.
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6. Enter device information and then select **Done**. Press **Add another** to claim a new device.




List of Compatible Gateways:

MV

MR

MV12(W/NE), MV22(X), MV32, MV72(X)

MR36, MR44, MR45, MR46, MR46E, MR55, MR56, MR76, MR86

 WARNING: Environmental sensors are only supported with second-generation MV cameras and Wi-Fi 6-compatible APs.

Minimum Firmware Version

MV

MR

2nd Gen MVs - MV 4.8 + Wifi 5 APs - MR 28.5.1 +

MV2 - MV 4.17+ Wifi 6 APs - MR 27.6 +

Please refer to [Managing Firmware Upgrades](#) to schedule an upgrade.

Installation Instructions



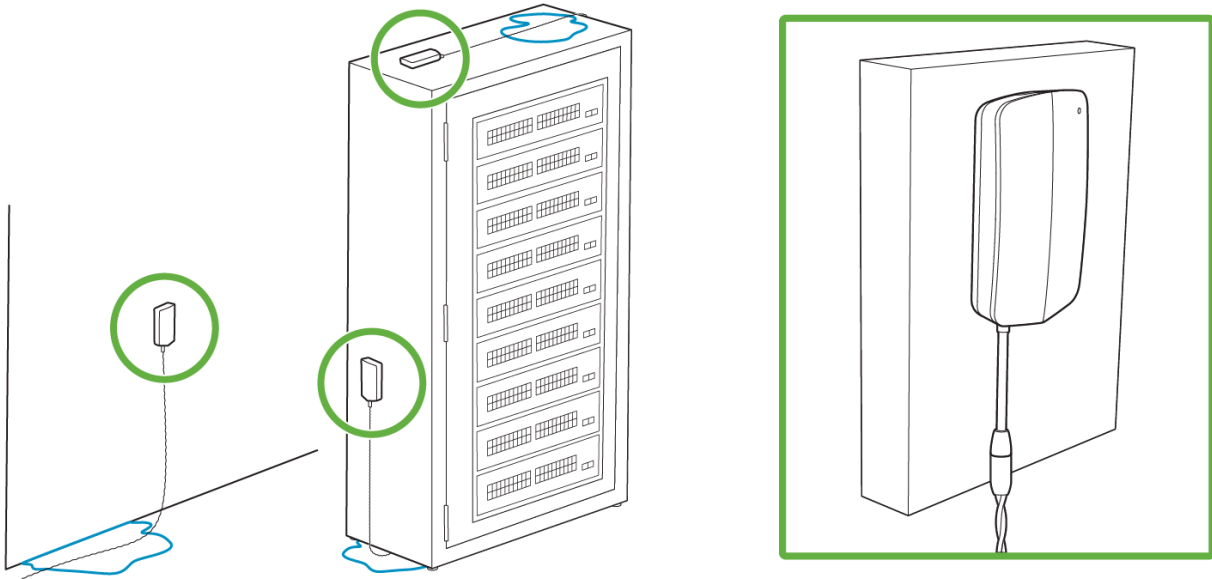
NOTE: Each MT12 comes with an instruction guide within the box. The Quick Install Guide (QIG) contains detailed step-by-step guides and images to assist you in the physical installation of the sensors.

Choosing Your Mounting Location

As MT sensors rely on a gateway for connectivity to the dashboard, make sure that a working compatible gateway is in range of the sensor when choosing a mounting location.

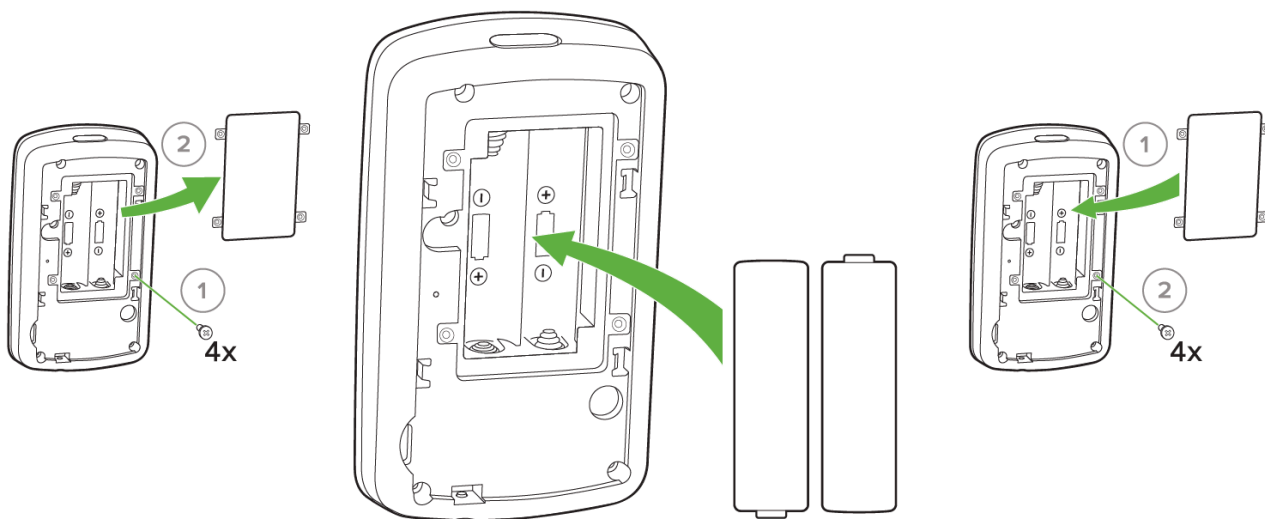
Some examples of ideal mounting locations:

1. On a wall to detect any leaks on the floor of a room.
2. Inside or on top of a rack to detect any leaks near the rack.



For most mounting scenarios, the MT12 has flexible options to provide quick and simple mounting. The instructions are as follows:

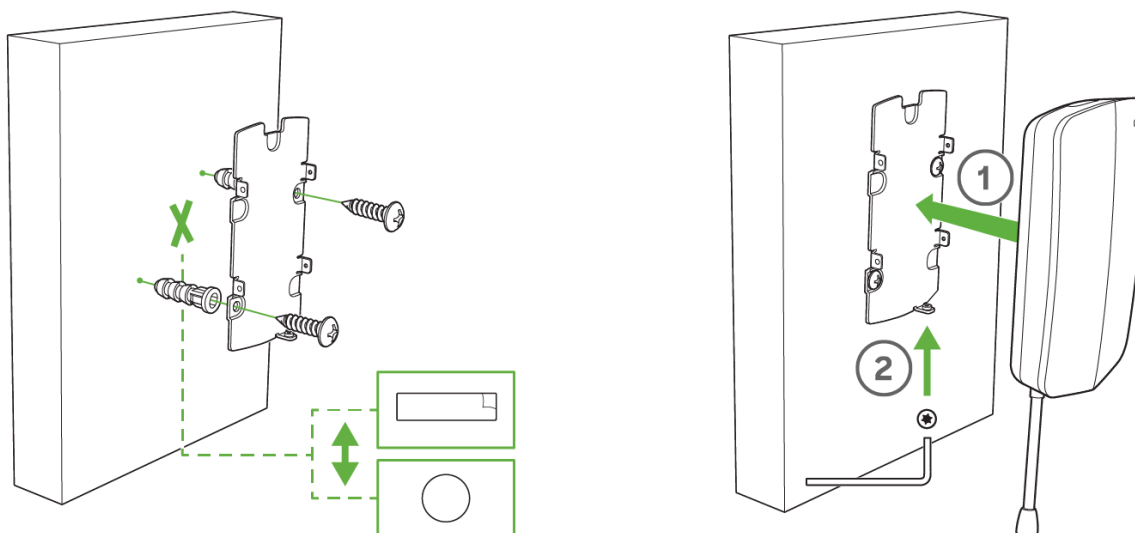
1. Start by removing the battery compartment cap and inserting two AA batteries into the battery compartment.



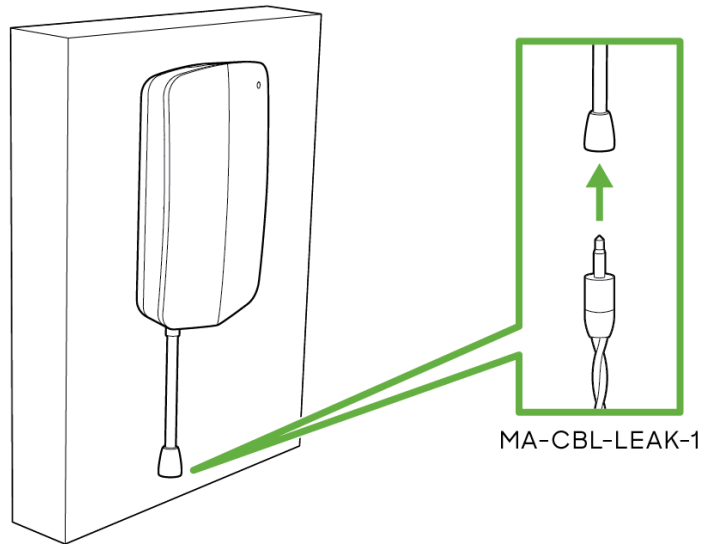
2. In order to mount the sensor on different locations, there are three options:

- a. Screws - The mounting plate can be directly screwed onto the wall.
- b. VHB tape - Double-sided VHB tape can be used to stick the mounting plate on any type of surface.
- c. Magnet - Stick the magnet on any surface and the mounting plate can be stuck to the magnet.

3. Once the mounting plate is on the desired surface, slide the MT12 sensor onto the plate and use the included Torx screw to secure the sensor.



4. Plug in the water leak detection cable to the female jack on the MT12 sensor and lead the cable to the area where you need to monitor the presence of water. The packaging also includes 8x VHB sticky pads that can be used to keep the cable in the desired place.



WARNING: To avoid water incursion on the female connector of the cable, make sure to use the supplied rubber caps to seal it off. If the open end of the cable gets wet, it might take a long time for the cable to be detected as dry. Please leave the cable in a dry area for up to two hours and then reconnect it to the sensor.

Testing the Connection

Once the device is mounted at the desired location and added to a network with a compatible gateway, press the general purpose button on the top of the sensor to wake it up and sync with the nearest gateway. Refer to the [LED indicators](#) section for more details on the status of the sensor.

- Solid green (for three seconds) = connected to a gateway.
- Solid amber (for three seconds) = MT could not find a gateway to connect. The RSSI value will still be reported on the dashboard. All connections < -85dBm will be rejected. Please relocate the sensor closer to the gateway for better connection quality.



When the sensor is connecting to a gateway for the first time, the LED light will blink green, which indicates that it is upgrading to the latest firmware configured on the dashboard.

Product Overview

Physical Specifications

Dimensions	117.1x65.7x23.3 mm (LxWxH)
Protection	IPX5 Rated

Power

- 2x AA alkaline batteries
- Permanent DC power: 5V; 0.2A USB-C (sold separately)

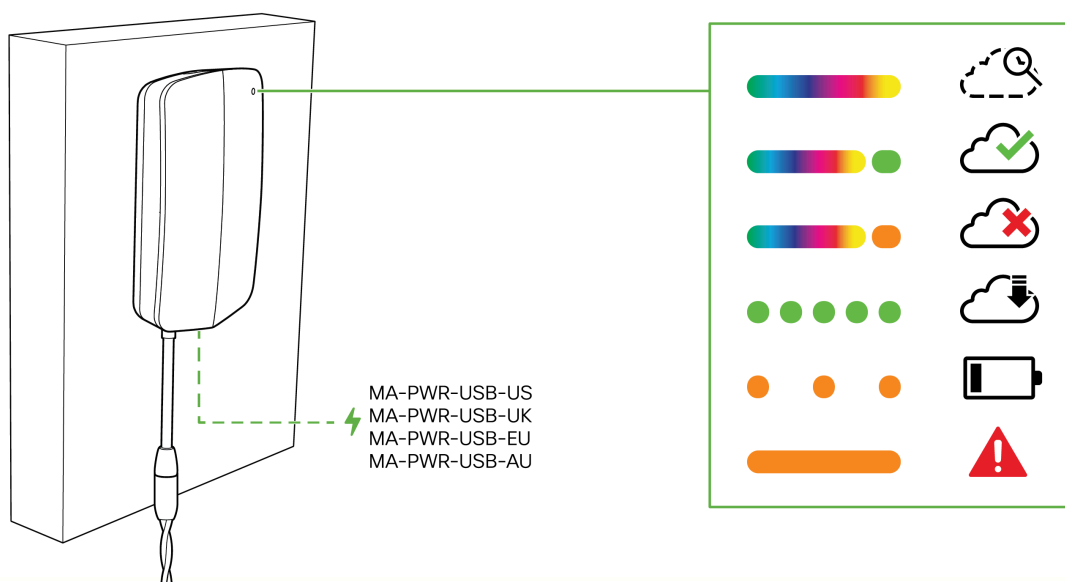
Operating environment

- **Temperature:** 0°C - 55°C (32F - 131F)
- **Relative Humidity:** 0 - 95% RH

Hardware

- Multicolor, multifunction status LED
- General purpose button
- Reset button
- USB-C port
- Water leak detection plug (female)

LED Indicators



- Rainbow = MT is initializing or looking for a gateway
- Solid green (for n seconds) = connected to a gateway
- Solid amber (for n seconds) = MT could not find a gateway to connect
- Flashing green = MT is upgrading its firmware
- Flashing amber = MT is running on a low battery



To conserve battery life, the LEDs on the MT12 don't always remain on.

General Purpose Button

The MT12 has a general purpose button on the top which allows you to wake up the sensor and test if it is able to connect to a gateway. This will also upload the current sensor data to the gateway.

Factory Reset Button

Next to the battery compartment, there is a pinhole button to factory reset the sensor. If the button is pressed and held for at least five seconds and then released, the sensor will reboot and it will be restored to its original factory settings by deleting all configuration information stored on the unit.


USB-C Port

The MT12 sensors have a USB-C port on the bottom that can be used to provide an alternate source of power using a compatible accessory.

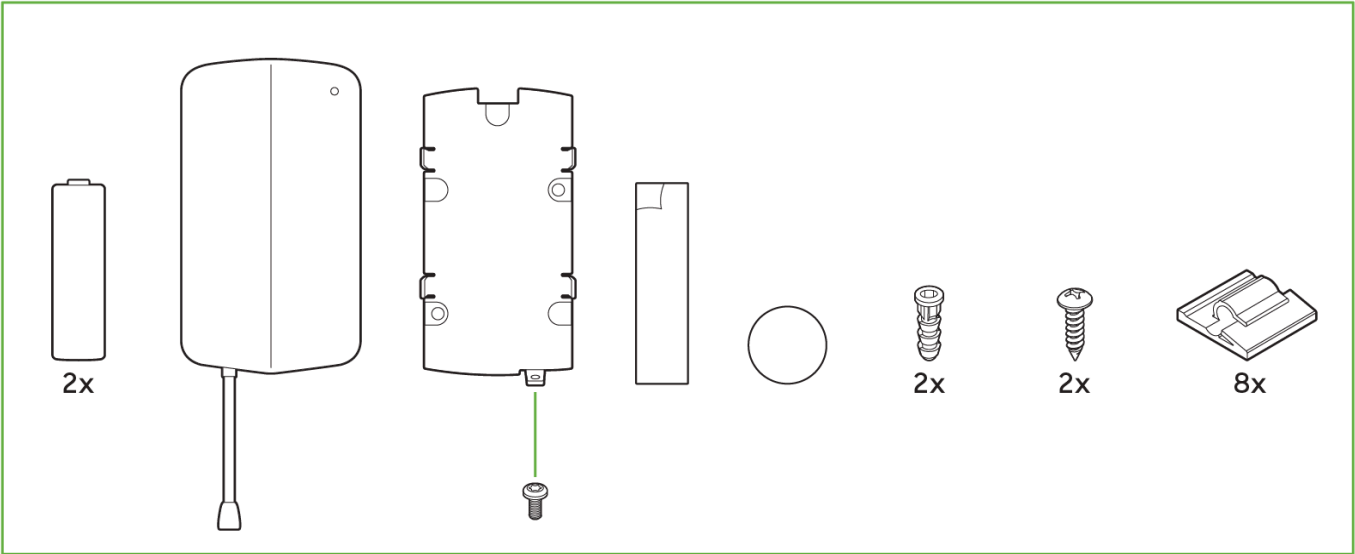
Water Leak Detection Probe

On the bottom of the MT12 sensors there's a tail with a female connector for the included water leak detection cable.

Every leak detection cable also has a female jack on the other end. The MT12 supports daisy chaining of up to two leak-detection cables to cover a larger area.

 The connector tips are **NOT** water sensitive. In order for water to be detected, the black/white coiled cable needs to come in contact with the liquid.

Package Contents



Unit	MT12-HW
Guides	Quick Installation Guide
Battery	2x AA batteries
Leak detection cable	1x MA-CBL-LEAK-1 (8ft/2.4m)

Mounting equipment

Wall-mount backplate

4x Torx screws (Torx screwdriver not included)

1x magnet

1x VHB tape

8x VHB cable anchors

1 x rubber cap

Support and Additional Information

If issues are encountered with device installation or if additional help is required, contact Meraki Support by [logging in](#) and opening a case via the Get Help section.

For additional information on Meraki hardware, and for other installation guides, please refer to documentation.meraki.com.