MT11

Cloud-Managed Probe Sensor
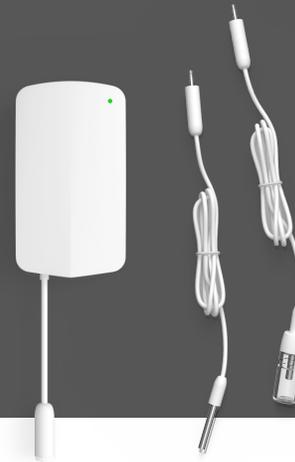
Overview

Refrigeration is a critical process to prevent spoilage and ensure compliance along the entire cold chain. Issues with refrigeration equipment can lead to wasted inventory, spread of food-borne illness, and costly downtime.

IoT sensors provide insight into environmental conditions where visibility is traditionally lacking. The Cisco Meraki MT11, part of the Meraki MT sensor portfolio, provides real-time temperature data of refrigeration assets to protect business-critical equipment and sensitive inventory.

Simple sensors. Powerful Meraki platform.

The Meraki MT11 reduces the complexity of traditional sensors by eliminating the need for dedicated gateways or management software. MT sensors automatically connect to Meraki MR access points and MV smart cameras as gateways, speeding up deployment time. MT sensors are fully cloud-managed and powered by the Meraki platform, providing single pane of glass visibility with all networked devices. Real-time visibility and configurable alerts keep you up-to-date wherever you are.

Once installed, MT11 will monitor conditions inside your refrigeration assets. If the compressor on your freezer fails, affecting the temperature of perishable goods inside, MT is watching. Customized alerts empower businesses to take action the moment an issue occurs to prevent costly downtime, inventory loss, or regulatory issues.

Product highlights

- Simple deployment enables rapid scalability across many sites

- Automatic connectivity to MR/MV devices in the same network

- Cloud-based management eliminates the need for on-premises servers

- Single pane of glass visibility with all Meraki products empowers lean teams

- Real-time data and customizable alerts via email, SMS, push notification, or webhook

- Multiple temperature probe choices for flexible monitoring

- Modern mobile app for on-the-go monitoring and troubleshooting

- Wireless connectivity using Bluetooth Low Energy

- Trust Anchor module (TAm) securely authenticates the device and encrypts all data

- Five-year battery life with two (2) user-replaceable AA batteries

- Optional AC-to-USB-C power adapter

- Vast partner ecosystem building custom applications with APIs and telemetry data

MT11 specifications

Temperature probe sensors

Bare Metal Temperature Probe	Cable length: 10 ft Range: -40°C to +55°C (-40°F to +131°F) Accuracy: -40°C to -30°C = +/- 2°C -30°C to -10°C = +/- 1°C -10°C to +55°C = +/- 0.5°C
Glycol-Encased Temperature Probe	Cable length: 10 ft Range: -40°C to +55°C (-40°F to +131°F) Accuracy: -40°C to -30°C = +/- 2°C -30°C to -10°C = +/- 1°C -10°C to +55°C = +/- 0.5°C

Wireless capabilities

Bluetooth Low Energy	**Compatible MV smart cameras and MR access points**
Operating frequency	2.400–2.4835 GHz
IEEE standard	802.15.1 (Bluetooth 4.2 Low Energy BLE)

Data logging

Data sampling	Sample polling every two minutes Data reporting to gateway every 20 minutes, or immediately upon threshold violation
Onboard data storage	4,000 data points (5 days of data at the default sampling rate)

Bluetooth® Low Energy (LE) messages encrypted and authenticated using Cisco Trust Anchor technology

Power

Two AA batteries or power adapter
Battery life up to five (5) years
Power ratings: 5V; 0.1A

Physical characteristics

Dimensions: 117.1mm X 65.9mm x 26.0mm (length x width x height)
Battery compartment
Multicolor, multifunction status LED
General purpose button
Reset button
USB-C Port
Sensor connection plug (receptacle connector)

MT11 operating environment

Temperature: -18°C to +55°C (0°F to +131°F)
Relative humidity: 0-95%

Warranty

Three-year hardware warranty with advanced replacement

MT11 specifications

Ordering information

MT11-HW	Meraki MT11 Temperature Probe Sensor
MA-CBL-TEMP-ME-1	Bare Metal Temperature Probe
MA-CBL-TEMP-GL-1	Glycol-Encased Temperature Probe
LIC-MT-XY	Meraki MT Enterprise License and Support (X = 1, 3, 5, 7 years)
MA-PWR-USB-XX	External Power Adapter (XX= US, EU, UK, or AU)

In the box

MT11-HW	
Quick-start and installation guide	
2x AA batteries (preinstalled)	
Mounting equipment	Wall mount backplate Magnet VHB tape 2 drywall anchors 2 mounting screws 8 cable clips (included with sensor probe) Mounting gasket (included with sensor probe)

Note: Each Meraki MT sensor requires a license to operate. MA-CBL-TEMP-ME-1 and MA-CBL-TEMP-GL-1 are sold separately but at least one is required for operation.

Learn more about Meraki Sensors at: meraki.com/sensors