

DATASHEET

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.



Smart sensors. Smarter businesses.

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 visibility into all networked devices via a single dashboard. 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
- Visibility into 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 Low Energy 4.2)

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 (five days of data at the default sampling rate)
Security	Bluetooth Low Energy 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: 117.1 mm (L) x 65.9 mm (W) x 26.0 mm (H)

Battery compartment

Multicolor, multifunction status LED

General purpose button

Reset button

USB-C port (receptacle connector)

Sensor connection plug (receptacle connector)

Operating environment

Temperature: 0°C to 55°C (32°F to 131°F)

Relative humidity: 0 to 95%

Warranty

Three-year hardware warranty with advanced replacement

Ordering information

Hardware

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)
MA-PWR-ETH	USB-C to Ethernet adapter

In the box

MT11-HW

Quick-start and installation guide

Two AA batteries (pre-installed)

Mounting equipment	Wall-mount backplate Magnet VHB tape Two drywall anchors Two mounting screws Eight cable clips (included with sensor probe) Mounting gasket (included with sensor probe)
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Notes:

- Each Meraki MT sensor requires a software license to operate, however every dashboard organization comes standard with five free MT licenses to help get started
- MA-CBL-TEMP-ME-1 and MA-CBL-TEMP-GL-1 are sold separately, but at least one is required for operation

To learn more,
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