cisco Meraki

MT11 Datasheet - Probe Sensor

MT11 Sensors

Cloud-Managed Sensors that help you have complete visibility across your business environment



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 separate gateway and 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 $+55^{\circ}$ C = $+/-0.5^{\circ}$ C

Cable length:

10 ft

Range:

-40°C to +55°C (-40°F to +131°F)

Glycol-Encased Temperature Probe

Accuracy:

 -40° C to -30° C = +/- 2° C

 -30° C to -10° C = +/- 1° C

 -10° C to $+55^{\circ}$ C = $+/-0.5^{\circ}$ 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)

Data logging

Sample polling every two minutes

Data Sampling

Data reporting to gateway every 20 minutes, or immediately upon threshold violation

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Onboard Data Storage 4,000 data points (five days of data at the default sampling rate)

Bluetooth Low Energy messages are encrypted and authenticated using Cisco Trust Anchor technology.

Physical characteristics

Dimensions: 117.1mm X 65.9mm x 26.0mm (length x width x height)

Weight (excluding batteries) 107g

2xAA Battery with upto 5 year battery life

Power

Power Rating: 5V; 0.1A

Multicolor, multifunction status LED

General purpose button

Hardware Reset button

USB-C port

3.5mm Cable connector

Operating Environment Temperature: 0°C - 55°C (32F - 131F)

Relative Humidity: 0 - 95% RH

Warranty 3 years

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

Meraki MT Enterprise License and Support

LIC-MT-XY

(X = 1, 3, 5, 7 years)

External Power Adapter

MA-PWR-USB-XX

(XX= US, EU, UK, or AU)

MA-PWR-ETH USB-C to Ethernet adapter

In the box

MT11-HW

Quick-start and installation guide

AA batteries (2)

Wall mount backplate

Mounting equipment Magnet

VHB tape

Each Meraki MT sensor requires a license to operate.

MA-CBL-TEMP-ME-1 and MA-CBL-TEMP-GL-1 are sold separately but are required for operation.