MT15 Datasheet - Indoor Air Quality w/CO2

Overview

Indoor air quality has become increasingly important to schools, businesses, and other organizations as they look to provide safe and comfortable environments.

MT15 is our highest performing air quality sensor, offering carbon dioxide monitoring for student and employee productivity. It monitors real CO2, TVOC, PM2.5, temperature, humidity, and ambient noise. It also offers a LED visual indicator to provide information about the air quality to the people in the room. Finally, the MT15 has flexible power options, including both a USB-C and PoE port on the device, which are positioned so that cables can be hidden.The MT15 can be

installed in any space but will be particularly useful for monitoring air quality in classrooms and office settings where students and employees spend a large majority of their time performing activities that require cognitive effort.

Businesses need a complete view of data to make sound decisions. Businesses need visibility into their network availability metrics, capex & opex, and customer satisfaction levels to deliver on their mission. While businesses have a good grip on embracing and utilizing data in the business world, they have yet to visualize the physical world fully.

Current solutions are complicated to install, do not scale and are difficult to use. Hence businesses do not have a simple and reliable way to have visibility into their critical assets to maximize their network uptimes, reduce equipment failure, reduce unnecessary site visits, and deliver best-in-class customer service.

So, Meraki is introducing a range of sensors to prevent loss and increase operational efficiency with ease. Our sensors are simple, scalable and secure. Our sensors also connect to the dashboard using the MV/MR, removing the need for expensive gateways. Customers can now gain real-time visibility into their critical business environment from a single pane of glass.

CLOUD MANAGED SENSORS

The Cisco Meraki MT15 sensors provide temperature, humidity, CO2, TVOC, PM2.5 and Ambient Noise monitoring for environments across industries using BLE (Bluetooth Low Energy) beacons on the MR and MV.

Our sensors are built from the ground up to be easy to manage without compromising on power and flexibility.

All Meraki sensors are managed through an elegant, intuitive cloud-based interface.

Meraki’s centralized management gives administrators granular visibility into their network.

INDUSTRY LEADING CLOUD MANAGEMENT

Cloud management has a number of benefits that make it easier to build networks large and small:

Automatic alerts based on customizable thresholds through SMS, Email and Mobile push notifications.

Enterprise-grade security which the Cisco Trustworthy Systems seal of approval.

Role-based administration.

Firmware upgrades and enhancements from the Meraki cloud.

Zero-touch provisioning for rapid deployment across sites.

Product Highlights

- Visual LED Indicator Ring
- Single pane of glass for sensor monitoring combined with your existing Meraki dashboard
- Always-on, real-time visibility (24/7/365 visibility)
- Simple to set up reporting and configuration
- Data mining APIs for custom development and integrations.
- Multiple installation options

- Flexible alerts via email, SMS, mobile push notifications and webhooks
- Provision multiple sensors in minutes

Technical Specifications

Sensors

Temperature	Range: 0°C - 55°C / 32F - 131F Accuracy: +/- 0.5°C
Humidity	Range: 0 - 95 % RH Accuracy: +/- 3% RH
CO2	Range: 400 ppm – 1’000 ppm; Accuracy: ±(50 ppm + 2.5% of reading) Range: 1’001 ppm – 2’000 ppm; Accuracy: ±(50 ppm + 3% of reading) Range: 2’001 ppm – 5’000 ppm; Accuracy: ±(40 ppm + 5% of reading)
Total Volatile Organic Compound	Range: 160-10000 ug/m^3 Accuracy: ± 20 µg/m³ + 15%
Particulate Matter (PM 2.5)	Range: 0-100ug/m^3; Accuracy: +/-10 ug/m^3 Range: 100 to 1000ug/m^3; Accuracy: +/-10% measured value
Ambient Noise	20 to 120 dBA

Wireless Capabilities

Bluetooth Low Energy "BLE 4.2"	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: Temp/Humidity - 30 seconds

	CO2 - 30 seconds TVOC - 3 seconds PM 2.5 - 1 second Ambient Noise - 5 seconds Data reporting to gateway: 20-minute interval, threshold violation
Security	Secure Bluetooth Low Energy "BLE" messaging using LTK(Long-Term Key)

Physical Characteristics

Dimensions	115.0(L)x125(W)x33.5(H)mm
Weight	216g
Power Ratings	USB-C: 5V;0.2A PoE: 802.3af (Power Only)
Operating Environment	**Temperature**: 0°C - 55°C(32F - 131F) **Relative Humidity**: 0 - 95 % RH
Hardware	Multicolor, multifunction status LED Ring General purpose button Reset button USB-C Port for External Power

Ordering Information

MT15-HW	Meraki Indoor Air Quality with CO2 Sensor
LIC-MT-XYR	Meraki MT Enterprise License (X = 1, 3, 5, 7, 10 years)
Accessories	External Power Adapter(Sold Separately): MA-PWR-USB-US MA-PWR-USB-UK MA-PWR-USB-EU MA-PWR-USB-AU

In the Box

Unit	MT15-HW
Guides	QIGs
Mounting equipment	Backplate, 2 mounting screws, 2 drywall anchors