

LM11 Level Monitor

[HW-LM11 DATASHEET](#) | [Model 060-00010](#)



OVERVIEW

The LM11 Level Monitor is a compact and ruggedised radar based sensor designed to measure the level of liquids contained in a wide range of vessels such as tanks, vessels and containers. It features a waterproof and chemical resistant enclosure, near real-time location updates via the Samsara Network and flexible mounting options.

The Level Monitor enables improved inventory management, throughput tracking, asset utilisation reporting and alerting of critical levels.

HIGHLIGHTS

- **Contactless Level Sensing:** Measure levels dry and liquid contents without exposure to harmful materials or other safety risks
- **Samsara Network:** Approximate location updates via Samsara's proprietary BLE gateway network
- **Inventory and throughput reporting:** Prevent service interruptions by maintaining clear visibility of asset inventory with detailed reports
- **Mobile-first tools:** Locate vessels and check levels in the field directly in Samsara's Fleet app
- **Easy installation:** Flexible mounting options for quick installation and various tanks and containers
- **Unified platform:** Unlocks a wide array of customisable reports, alerts and workflows for workers and admins as part of Samsara's Connected Operations Platform

Technical Specifications

CONNECTIVITY

Data Communications: 2.4 GHz ISM Band

ISM Band Output power: 20 dBm (US), 13 dBm (EU)

Radar output power: <20 dBm EIRP, 57–64 GHz operating band

Operating area: United States, Canada, UK, Mexico, Europe

Secure Communications: All communications are anonymised and authenticated using AES encryption

LOCATION

Approximate geolocation is based on the GPS location of nearby gateways in the Samsara network that detect the Level Monitor 2.4 GHz advertisements.

POWER

The Level Monitor is powered by two high-capacity lithium CR-AG batteries that are designed to last seven years under nominal conditions and are not replaceable. Actual battery life may be reduced by extreme temperatures. For questions about the safe use of lithium battery-powered devices, please consult your company's safety department.

Rating 6 V, 0.125 A max

ENCLOSURE

- Material: PVDF
- Dimensions: 88.0 x 88.0 x 30.0 mm
- Weight: 200 g
- Operating Temperature -40°C to 70°C
- IP Rating
 - IP67 (weatherproof and water resistant up to 1 m submerged)
 - IP69K (highest grade resistance to high-pressure and high-temperature washdown)

SAMSARA CLOUD SOFTWARE FEATURES

- Inventory Report
- Throughput Report
- Critical Level Alerts
- Approximate GPS-based location tracking
- Developer APIs
- Geofence

INSTALL ACCESSORIES

What's Included

1 x Double-Sided VHB mounting tape

Optional Accessories

2-inch NPT adapter

Flat plate adapter

Regulatory Information

IC STATEMENT

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with Innovation, Science and Economic Development Canada RF exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated to ensure a minimum of 20 cm spacing to any person at all times. CAN ICES-3(A)/NMB-3(A)

IC Radiation Exposure Statement: This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body

FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For detailed product specifications and important safety information, please refer to the product's installation guide, available at <http://samsara.com/lm11-install>.