Monnit
Wireless Liquid Level Sensor

General Description

The wireless liquid level sensor uses a solid state, continuous (multi-level) fluid level sensor for measuring levels in water, non-corrosive water based liquids and dry fluids (powders).

Features

- Detects level of water or liquid in a container.
- Free iMonnit basic online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email.

Principle of Operation

The wireless liquid level sensor uses a solid-state, resistance sensitive ribbon sensor to measure the level of a liquid in a container. User customization allows you to set the frequency of sensor readings. The readings are sent to the iMonnit Online Sensor Monitoring and Notification System. iMonnit stores all data in the online system where the data can be reviewed and exported as a data sheet or graph. Notifications can be set up through the online system to alert the user when set levels are reached.
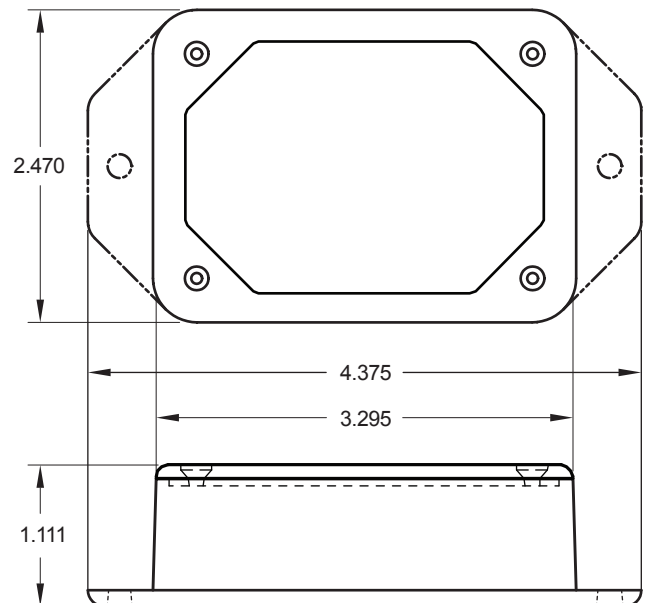
Example Applications

- Monitor and track tank levels.
- Monitor and track container levels.
- Track non-corrosive fluid levels.
- Monitor sump pit levels.

Monnit Sensors Core Specifications

- Power: Replaceable 3.0 V coin cell battery
- Communication: RF 900, 920, 868 and 433 MHz
- Dimensions: 1.775" x 1.040" x 0.785"
- Antenna: 4" wire antenna
- Device Range: 250 - 300 ft. non-line-of-sight*
- Battery Life: At 1 hour heartbeat setting, AA batteries will last more than 4 years.**

 * Actual range may vary depending on environment.
** Battery life is determined by sensor reporting frequency and other variables.

Technical Specifications

Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 µA (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Electronics Operating Temperature **	Using Alkaline AA Batteries: -18°C to +55°C (0°F to +130°F) Using Lithium AA Batteries: -40°C to +85°C (-40°F to +185°F)
Ribbon Sensor Length	8 in. = 8.1" (205.74mm) 24 in. = 24.1" (612.14mm)
Ribbon Sensor Width	1.0" (25.4mm)
Ribbon Sensor Thickness	0.015" (0.381mm)
Active Sensor Length	8 in. = 8.6" (218.4mm) 24 in. = 22.6" (218.4mm)
Sensor Resolution	1/32 inch (0.794mm)
Actuation Depth	Nominal 1 inch (25.4mm)
Sensor Material	Polyethylene Terephthalate (PET)
Certifications	FC CE Industry Canada 900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 920 MHz product; ARIB STD-T108 R210-103733. 868 and 433 MHz product tested and found to comply with: CISPR 22:2008-09 / EN 55022:2010 - Class B and ETSI EN 300 220-2 V2.4.1 (2012-05).

 * Hardware can not withstand negative voltage. Please take care when connecting a power device.
** At temperatures above 100°C, it is possible for the board circuitry to lose programmed memory.

Caution/Notice:

This product is designed for application in an ordinary environment (normal room temperature, humidity and atmospheric pressure). Do not use this sensor under the following conditions as these factors can deteriorate the product characteristics and cause failures and burn-out.

- Corrosive gas or deoxidizing gas - chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxides gas, etc.).
- Volatile or flammable gas.
- Dusty conditions.
- Under low or high pressure.
- Wet or excessively humid locations.
- Places with salt water, oils chemical liquids or organic solvents.
- Where there are excessively strong vibrations.
- Other places where similar hazardous conditions exist.

Use this product within the specified temperature range. Higher temperature may cause deterioration of the characteristics or the material quality of this product.

MONNIT™

For more information about our products or to place an order, please contact our sales department at 801-561-5555.

Visit us on the web at www.monnit.com.

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