

Monnit Industrial

Wireless Magnet Detection Sensor

Technical Overview

General Description

Monnit's industrial wireless magnet detection sensor can be used to detect the presence of a magnetic source. Place a magnet strip on a motor or machinery to measure movement and placement.

Features

- Detects when a magnet is present.
- Magnet is included.
- 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

Monnit's industrial wireless magnet detection sensor uses a magnetic switch to detect the presence or removal of a magnetic source. When the sensor detects that a magnet is removed or returned it sends the information to the iMonnit Online Sensor Monitoring and Notification System. The data is stored in the online system and 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 a magnetic source is present or not with the ability to only notify within time of day parameters.

Solar Power Option

Monnit Industrial Sensors are powered by a replaceable 3.6 V battery (included).



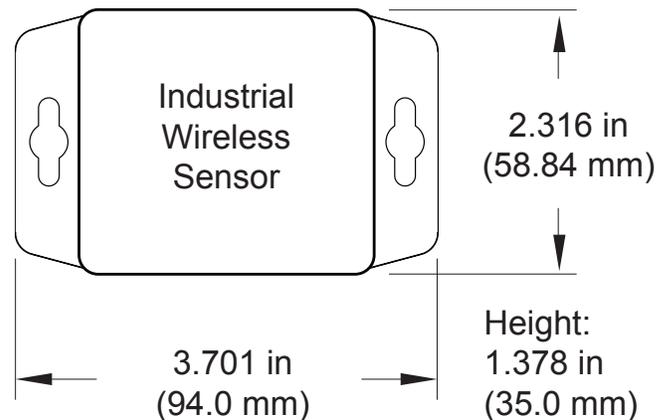
An optional solar powered version is also available. The solar powered sensor uses a Lithium Iron Phosphate rechargeable battery in conjunction with a solar power cell, extending the life of the battery.



Monnit Industrial Sensor Electronics Specifications

- Power: replaceable 3.6V battery (included)
- Communication: RF 900, 920, 868 and 433 MHz
- Dimensions: 3.7" x 2.23" x 1.38"
- Antenna: 3dBi RP SMA antenna
- Operating Temperature: -40° to 85°C (-40° to 185°F)
- Transmission Range: 300 - 350 ft. non-line-of-sight*
- Battery Life: at 1 hour heartbeat setting, battery will last ~ 4-5 years.**

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



Applications

- Doors and windows.
- Production line tracking.
- Machine RPM tracking.

The Leader in Low Cost Wireless Sensors

Technical Specifications	
Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 μ A (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Operating Temperature Range (Board Circuitry and Battery)	-40°C to +85°C (-40°F to +185°F) **
Optimal Battery Temperature Range (Battery)	+10°C to +60°C (+50°F to +140°F)
Contact Type	SPST, gold under -plating with Deactivated Rhodium outer-plating
Switch Cycles	50 million
Operation Gap	3/4 inch
Magnet Case Construction	Weatherproof, high-impact ABS plastic
Magnet	Alnico
Magnet Temperature Range	-26°C to +71°C (-15°F to +160°F)
Enclosure Rating	NEMA 1, 2, 4, 4x, 12 and 13 rated, sealed and weather proof
Certifications	 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 cannot 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.

Type 1, 2, 4, 4X, 12 and 13 NEMA Rated Enclosure:

Monnit's Industrial sensors are enclosed in reliable, weatherproof NEMA rated enclosures. Our NEMA rated enclosures are constructed for both indoor or outdoor use and protect the sensor circuitry against the ingress of solid foreign objects like dust as well as the damaging effects of water (rain, sleet, snow, splashing water, and hose directed water).

- Safe from falling dirt.
- Protects against wind blown dust.
- Protects against rain, sleet, snow, splashing water, and hose directed water
- Increased level of corrosion resistance
- Will remain undamaged by ice formation on the enclosure



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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