



## Wireless Magnetic Sensor

### Technical Overview

#### General Description

The OEM RF Wireless Magnetic Sensor can be used to detect the presence of a magnetic source using a reed switch.

#### Features

- Detects when a magnet is present.

#### Principle of Operation

The OEM Wireless Magnetic Sensor uses a reed switch to detect the presence or removal of a magnetic source. When the sensor detects that the magnet is removed or returned it sends the information to the sensor monitoring software. The data is stored in the software 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.

#### OEM Sensor Core Specifications

- Power: 3.0 V coin cell battery
- Communication: RF 900, 868 and 433 MHz
- Antenna: 4" wire antenna
- Operating Temperature: -40° to 85°C (-40° to 185°F)
- Device Range: 250 - 300 ft. non-line-of-sight\*
- Only 1 inch by 1 inch

\* Actual range may vary depending on environment.

#### Applications

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

### 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 Range	-40°C to +85°C ( -40°F to +185°F ) **
Available Operating Frequencies	900 MHz (25 Channels), 868 MHz (5 Channels) and 433 MHz (15 Channels)
Operation Time / Release Time	0.5 ms (max) / 0.1 ms (max)
Shock	11ms ½ sine wave / 100 g (max)
Vibration	50 - 2000 Hertz / 30 g (max)
Resonant Frequency	8500 Hz (typ)
Pull-In Range	10 - 25 Ampere Turns
Rating Sensitivity	15 Ampere Turns
Certifications	 900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 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 to lose programmed memory.

For more product information, to get a quote, or to place an order, please contact our sales department at 801-561-5555. Visit us on the web at [www.oemsensors.com](http://www.oemsensors.com).

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