

# Monnit WIT™

## Wireless Magnetic Sensor



### Technical Overview

#### General Description

The 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.
- 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

The 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 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.

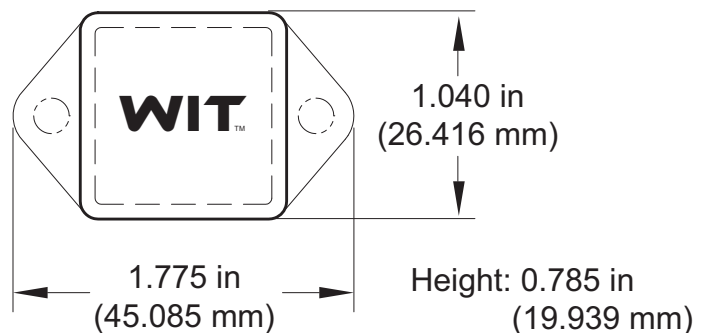
#### Example Applications

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

#### Monnit WIT Sensors Core Specifications

- Power: Replaceable 3.0 V coin cell battery
- Communication: RF 900, 868 and 433 MHz
- Dimensions: 1.775" x 1.040" x 0.785"
- Antenna: 4" wire antenna
- Operating Temperature: -20° to 60°C (-4° to 140°F)
- Device Range: 250 - 300 ft. non-line-of-sight\*
- Battery Life: At 1 hour heartbeat setting, coin cell battery will last ~ 1-2 years.\*\*

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



**The Leader in Low Cost Wireless Sensors**

Technical Specifications	
Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 $\mu$ 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)	-20°C to +60°C ( -4°F to +140°F ) **
Optimal Battery Temperature Range (Coin Cell)	+10°C to +50°C ( +50°F to +122°F )
Operation Time	0.5 ms (max)
Release Time	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

\* 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 Corporation  
7304 South Cottonwood  
Suite #204  
Midvale, Utah 84047  
801-561-5555  
www.monnit.com

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](http://www.monnit.com).