

# ION GATEWAY

## Wireless Dry Contact Sensor



### General Description

The Wireless Dry Contact Sensor can be used to detect contact between two wired contact points, an external mechanical switch or a contact plate.

### Features

- 3 ft. leaded wires.
- Can integrate switches.
- Ion Gateway basic online wireless sensor monitoring and notification system to configure sensors, view data, and set alerts via SMS text & email.

### Principle of Operation

The Ion Gateway Wireless Dry Contact Sensor detects when there is contact between the two wired end points. It can easily be integrated into existing switches or contact plates. When the sensor detects contact between the two end points, it will immediately turn on the RF radio and transmit data to the wireless gateway and Ion Gateway Online Sensor Monitoring and Notification System, allowing the user to immediately receive an SMS text or email alert. The sensor can be configured to detect both closed and open loops alerting if contact is made or broken.

### Power Options

Sensors are powered by a replaceable 3.0 V coin cell battery.

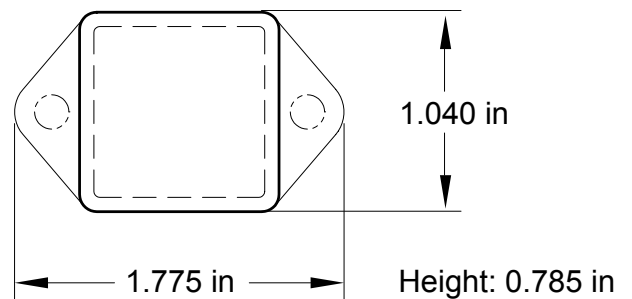
It is recommended that you set the heartbeat to no faster than one hour to preserve battery life.

### Ion Gateway Sensor Core Specifications

- Power: Replaceable 3.0 V coin cell battery
- Dimensions 1.775" x 1.040" x 0.785"
- Antenna: 4" wire
- 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.



### Applications

- Barn door monitoring
- Freezer / cooler door monitoring
- Forklift seat switches
- Button or switch integration
- Production line tracking



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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 Coin Cell)	20°F to 140°F **
Optimal Battery Temperature Range (Coin Cell)	50°F to 122°F
Lead Wire Length	3 ft. (36 in.)
Detection Wires	High Impedance

\* Hardware can not withstand negative voltage. Please take care when connecting a power device.

\*\* At temperatures above 212°F, 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.

