

# ION GATEWAY

## Wireless Open / Closed Sensor



### General Description

The Wireless Open / Closed Sensor can be used to detect when a door or window is opened and closed using a magnetic switch.

### Features

- Detects when a door or window is accessed.
- Magnet is included.
- 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 Wireless Open / Closed Sensor uses an external magnetic switch to detect the presence or removal of a trigger magnet. When the sensor detects that the magnet is removed or returned it sends the information to the Ion Gateway 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.

### Power Options

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

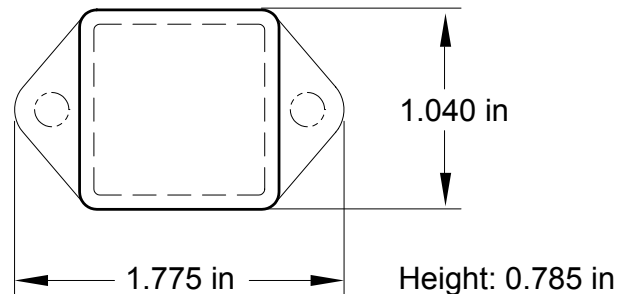
It is recommended that you set the heartbeat to no faster than one hour to preserve battery life.

### Ion Gateway Sensor Core Specifications

- Power: Replaceable 3.0 V coin cell battery
- Dimensions 2.875" x 1.280" x 0.450"
- Sensor Leads: 15 inch
- 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

- Doors and windows
- Cabinets and lockers
- IT server closets
- Freezer and cooler doors



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Technical Specifications - Electronics	
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

Technical Specifications - Magnetic Switch	
Contact Type	SPST, gold under -plating with Deactivated Rhodium outer-plating
Switch Cycles	50 million
Operation Gap	Up to 3/4 inch
Wire Leads	22 gauge / 15 inch length
Magnet	Alnico
Magnet Case Construction	Weatherproof, high-impact ABS plastic with self-adhesive backing
Magnet Temperature Range	-15°F to 160°F

\* 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.

