LEEDARSON

We build your success in IoT.

Door window sensor

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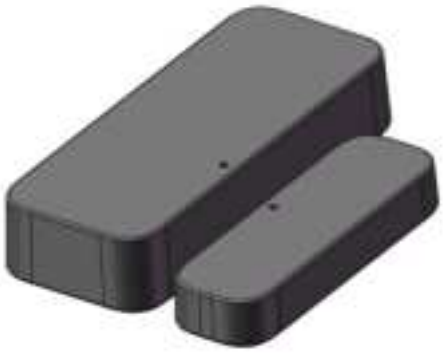
Quick Start Guide

1. In the box

Door/Window sensor

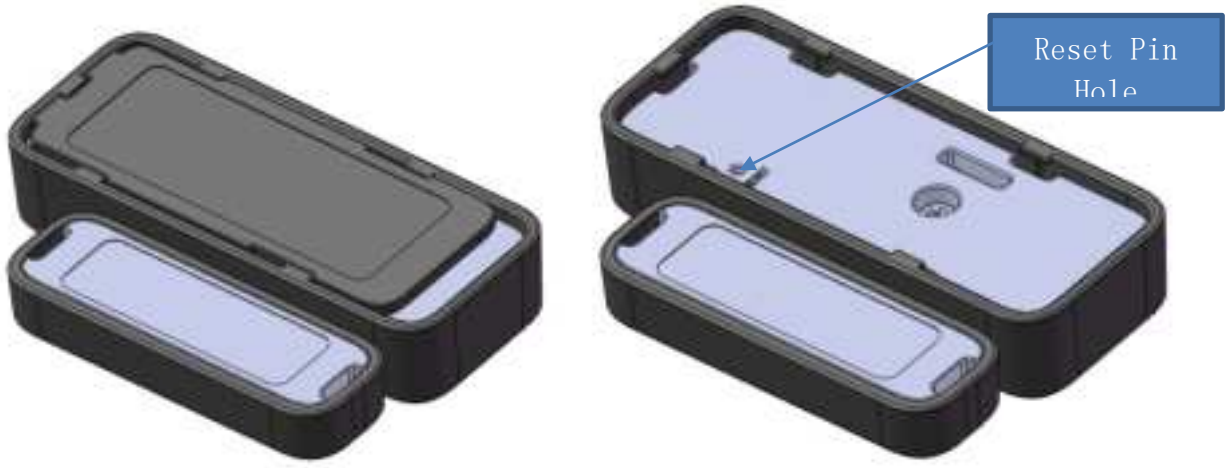


2. Product introduction

The Leedarson door window sensor is designed for use with scenes in home automation and security systems, the door window sensor lets you know when door or windows is opened and can trigger different actions in response to that open action (or close action).
This product can be operated in any Z-Wave® network with other Z-Wave Plus® certified devices from other manufacturers.
This product is a battery power, it's sleep most of the time.
The door sensor is a security enabled Z-Wave Plus® device. A security Enabled Z-Wave Plus® Controller must be used in order to fully utilize the product.

Key Features:

- Support Association Group and Report Open/Close status;
- Support firmware upgrades via Over-the-air (need Gateways support);
- Support SmartStart;
- Support Long Range.



Sensor Specification	
Detection Technology	TMR Sensor
Detection Range	20mm±5mm
Communication Protocol	Z-Wave mesh/ Z-Wave Long Range
Radio Frequency	Z-Wave mesh: US/CA: 908.4, 908.42, 916 MHz Z-Wave LR: US/CA: 912 and 920 MHz
Wireless Range	1000’ in an open-air, interference free, line of sight environment.
Power Source	3V, CR2032 *2
Battery Life	6 years
Mounting	3M Tape
Operating Temperature	0°C to 40°C
Operating Humidity	Up to 85% non-condensing
Tamper switch	YES
Certifications	FCC
LED	1*RG LED

LED/Button behavior

No.	Events	Behavior
1	power up	Exclusion status: Red LED quick blink 3 times Inclusion status: Green LED on 1s;
2	Inclusion/Add	Inclusion: Green LED quick blink; Inclusion success: Green LED on 3s; Pairing fail: Red LED on 3s;
3	Exclusion/Remove	APP remove device: 1.Press the "Reset" button quickly twice to enter "Exclusion" mode. The green light will flash quickly; 2.Exclusion success: Red slow blink 3s. Button reset: 1.Hold 1-5 seconds: no action, LED off; 2.Hold more than 5 seconds: press and hold Reset button more than 5 seconds the Red LED quick blink; 3.And then release button Green LED on 3 seconds;
4	Door TMR detection	Report success：Green LED on 300ms;
5	Tamper	Tamper: Red quick blink 3s;
6	Battery	Low power：Red slow blink 3s; Failed power: LED off, MCU shutdown;
7	OTA	LED Off

8	Short press Reset Button	1) Factory status: short press the Reset Button to wake up sensor to enter the pairing mode; 2) Installed status: short press the Reset Button 3 times to wake up sensor to running active mode to communication with control panel;
9	Press and hold Reset Button	Hold 1-5 seconds: no action, LED off; Hold more than 5 seconds: press and hold Reset button more than 5 seconds the Red LED quick blink ,and then release button Green LED on 3 seconds, the sensor running to factory reset mode to delete user data and restart to factory reset status;

3. Z-Wave specification

Feature	Specification
Z-Wave standard	Z-Wave plus 2
Z-Wave SDK	v7.22.2
Z-Wave security	S2
Z-Wave library type	0x03
Z-Wave protocol vertion	0x07
Z-Wave protocol sub version	0x16
Generic device type	0x07 (Notification sensor)
Specific device type	0x01 (Specific type notification sensor)
Role type	0x06 (reporting sleeping end device)
Installer Icon Type	0x0C06 (Door/Window Alarm)
Icon Type	0x0C06 (Door/Window Alarm)
Product Type ID	0x0301
Product ID	0x0001
Manufacture ID	0x0300 (Leedarson MFID)

Z-Wave command classes	0x5E - COMMAND_CLASS_ZWAVEPLUS_INFO, version 2 0x59 - COMMAND_CLASS_ASSOCIATION_GRP_INFO, version 3 0x85 - COMMAND_CLASS_ASSOCIATION, version 2 0x80 - COMMAND_CLASS_BATTERY, version 3 0x70 - COMMAND_CLASS_CONFIGURATION, version 4 0x5A - COMMAND_CLASS_DEVICE_RESET_LOCALLY, version 1 0x7A - COMMAND_CLASS_FIRMWARE_UPDATE_MD, version 5 0x87 - COMMAND_CLASS_INDICATOR, version 3 0x72 - COMMAND_CLASS_MANUFACTURER_SPECIFIC, version 2 0x8E - COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION, version 3 0x71 - COMMAND_CLASS_NOTIFICATION, version 8 0x73 - COMMAND_CLASS_POWERLEVEL, version 1 0x9F - COMMAND_CLASS_SECURITY_2, version 1 0x6C - COMMAND_CLASS_SUPERVISION, version 2 0x55 - COMMAND_CLASS_TRANSPORT_SERVICE, version 2 0x86 - COMMAND_CLASS_VERSION, version 3 0x84 - COMMAND_CLASS_WAKE_UP, version 2
Required Security class	0x59 - COMMAND_CLASS_ASSOCIATION_GRP_INFO, version 3 0x85 - COMMAND_CLASS_ASSOCIATION, version 2 0x80 - COMMAND_CLASS_BATTERY, version 3 0x70 - COMMAND_CLASS_CONFIGURATION, version 4 0x5A - COMMAND_CLASS_DEVICE_RESET_LOCALLY, version 1 0x7A - COMMAND_CLASS_FIRMWARE_UPDATE_MD, version 5 0x87 - COMMAND_CLASS_INDICATOR, version 3 0x72 - COMMAND_CLASS_MANUFACTURER_SPECIFIC, version 2 0x8E - COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION, version 3 0x71 - COMMAND_CLASS_NOTIFICATION, version 8 0x73 - COMMAND_CLASS_POWERLEVEL, version 1 0x86 - COMMAND_CLASS_VERSION, version 3 0x84 - COMMAND_CLASS_WAKE_UP, version 2

Indicator Command Class

Indicator ID	Property ID	Notes
0x50(NODE IDENTIFY)	0x03 (ON OFF PERIOD)	
0x50(NODE IDENTIFY)	0x04 (ON OFF CYCLES)	
0x50(NODE IDENTIFY)	0x05 (ONE TIME ON OFF PERIOD)	

Association Group

ID	Name	Notes
1	Lifeline	1) Supported Nodes: 5; 2) Profile: 0x0001; 3)Command Class:0x80035A0187037105;
2	Basic Set	1) Supported Nodes: 5; 2) Profile: 0x7107; 3)Command Class:0x2001;

Configuration Parameters

ID	Name	Notes
1	Sensor Status	1) Format: Unsigned Interger; 2)Size: 1 Byte, Max 0xFF, Min 0x00, Default 0x00; 3)Read only: Yes; 4)Altreing: NA; 5)Advanced:NA;

Notification

Type	Events	Notes
Accsess control(0x06)	1) Window/door is open: 0x16; 2)Window/door is closed: 0x17;	
Home security(0x07)	1)State idle: 0x00; 2)Tampering, product cover removed: 0x03;	

Wakeup

ID	Events	Notes
1	wake up event	1) Minimum Wake Up Interval Seconds is 20 seconds; 2) Maximum Wake Up Interval Seconds is 86400 seconds; 3) Default Wake Up Interval Seconds is 300 sencods; 4) Wake Up Interval Step Seconds is 20;

4. Product Installation

QR code and DSK

i.The QR code are stocked to the side of the case, DSK is included in the QR code.

ii.The DSK code can be found on the DSK label which is attached on the packaging box.

PACKAGE	DEVICE
	

Installation steps:

This product can be mounted by 3M adhesive tape, install it according to the following step:

iii.Remove the plastic sheet for isolating battery from battery cabinet.

iv.Use a pin to reset the pinhole switch for 5 seconds to reset the sensor. The sensor will be in pairing status. This will cause a red LED will quick blink, Release the button, if Green LED solid for 3s, the reset is successful, and the device will return to the factory setting.

v.Short press Reset button, sensor starts pairing, Green LED quick blink until the pairing begins.

Add/inclusion: Green quick blink until time out.

Add/inclusion success: Green LED on 3s

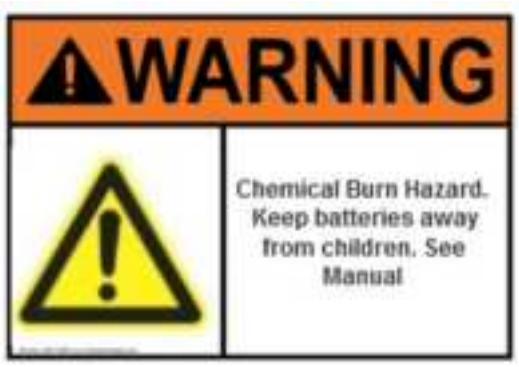
Add/inclusion fail: Red LED on 3s and then turn off. User can short press the button again to start pairing again

vi.Stick the slim magnet and device onto the door/window, no further than 20 mm from the sensor, fix the device on the door/window by 3M tape.

The magnet and the main sensor must be less than 20 mm apart. Main sensor must be affixed to the frame and the magnet must be affixed to the door window.

Should not be mounted on a metal frame.

5. Safety Information



Battery Safety Information:

• This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death. Keep away from babies and small children at all times.

• If battery is swallowed or placed inside any part of the body, immediately seek medical help.

• Risk of explosion if battery is replaced by an incorrect type.

• Dispose of used battery promptly.

IMPORTANT: Do not expose to rain. Install the product at least 3 ft. from the oor for optimum performance. This alarm contains small parts and is not suitable for children. Periodically check the condition of the batteries.

Disposal and Recycling Information: 

Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environment safe recycling.

6. Maintenance

How to reset a door/window sensor?

Keep pressing the reset key about 5 seconds, then the red LED indicator will start blinking quickly. Once release the key, and then release button Green LED on 3 seconds, the sensor running to factory reset mode to delete user data and restart to factory reset status.

How to join a door/window sensor?
After the sensor is reset to the factory setting, the device running to SmartStart mode to scan Z-Wave network, user can scan device QR code to add it to Z-Wave hub via APP.

This product is just for indoor use only. Should be affixed indoors and away from sources of moisture.
This product has low voltage detection reminder. When the battery voltage is in low status, the sensor will give out low battery signal to Z-Wave hub. Replace the battery timely on low battery warning to ensure the sensor works properly. Please use battery model CR2032 only.

1. Remove sensor from bracket(Fix bracket and move sensor up)
2. Replace battery if battery is low power.

7. FCC compliance notice

FCC ID: (to be filled)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution:
Changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC Statement:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

Wireless protocol: Z-Wave mesh/Z-Wave long range
This device is fully Z-Wave certified and will work with other open Z-Wavecertified systems.