



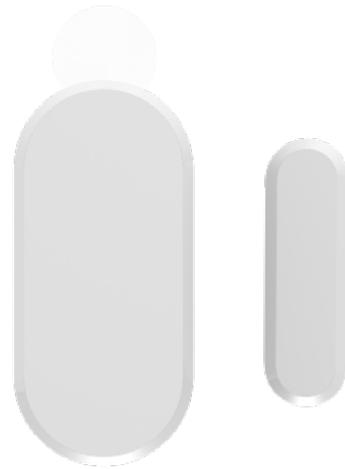
S4 Bluetooth® 5.0 Door Sensor

Datasheet



PRODUCT OVERVIEW

The S4 Bluetooth® 5.0 Door Sensor is a door magnetic sensor using BLE 5.0 technology. A low-power sensor is used to convert the door and window state signal into a digital signal and transmit data through BLE broadcast. The broadcast has the opening and closing counter information. Combined with the cloud platform, it can not only cooperate with G1 and other gateways to realize real-time monitoring, intelligent care, abnormal reminder, scene linkage, and other functions, but also cooperate with MG5 and other battery-powered LTE gateway, reduce the power consumption of the gateway and extend the battery life, and complete the monitoring task.



KEY FEATURES



Maximum
100-meter
advertising range



Door magnetic
detection and
anti-disassembly
detection



Support timing
monitoring



Up to 2048
Storage



Battery replaceable,
13 Months of life



OTA available

APPLICATION SCENARIOS



Smart Building

S4 Bluetooth® 5.0 Door Sensor is deployed at doors and Windows, cabinet doors. With G1 intelligent gateway and cloud platform, a system with real-time monitoring of the status of doors and Windows switches can be established, and users can view through the system background or mobile phone APP. For homestay, supermarket and other scenarios, working hours can be set and the opening and closing status of door and window cabinets can be monitored remotely to improve efficiency.



Smart recuperation

In medical care, elderly care and other scenarios, S4 Bluetooth® 5.0 Door Sensor, equipped with various sensors and cloud platforms, can also comprehensively calculate user actions and estimate the consumption of supplies, so as to facilitate the staff to timely supplement and provide help.



Smart Warehouse

In the storage and transportation scene, S4 Bluetooth® 5.0 Door Sensor can be deployed to the container, cabin door and other positions, and LTE gateway can also be matched to obtain the direct opening and closing times of the container through the "opening and closing times" in the broadcast, so as to save the power of the gateway and extend the maintenance cycle, and achieve the purpose of monitoring the opening and closing status of the container.

Note: The above application direction is only for reference, and customers can achieve more applications according to their own algorithm capabilities and a certain degree of software platform development technology.

PRODUCT SPECIFICATIONS

BASIC SPECIFICATIONS

Main body material	ABS
Color	White (customizable)
Size (L * W * H)	main part: 55.0 * 26.2 * 13.0 mm magnet: 38.5 * 12.5 * 11.0 mm
Weight	26.6g (battery included)
Resistant level	/
Switch	Anti-disassembly Switch (Not used for boot or shutdown)
LED	exist
OTA	support
Configuration APP	MSensor

TECHNICAL SPECIFICATIONS

BLE chipset	nRF52 series
BLE version	BLE 5.0
Frames	INFO / Combination Frame
Broadcast power	-20dBm~4dBm (default 0 dBm)
Broadcast distance	Up to 100 meters (open space) 25 meters (Connection Configuration Distance)
Battery	CR2032*1 220mAh
Battery Life	Approximate 13 months (default settings, ambient temperature under 25℃)
Sensor	SMC magnetic switch
magnetic switch trigger distance	25 ~ 30mm
Working temperature	-20℃~60℃
Working humidity	0%RH~95%RH

ACCURACY PARAMETER

Type	Items	Description
INFO	MAC Address	MAC address (6bytes)
	Battery Level	Battery Level (1bytes)
	Tx power	0dBm
	Interval (ms)	4000ms
Combination	Door sensor Current Status	Current state of the sensor (1bytes)
	The door opening serial number	Door opened serial number 0x00~0xFF (1byte)
	The closing opening serial number	Door closed serial number 0x00~0xFF (1byte)
	Anti disassembly alarm serial number	Anti-disassembly serial number 0x00~0xFF (1byte)
	Tx power	0dBm
	Interval (ms)	Regular mode 0dBm 1000ms Energy-saving mode 0dBm 900ms

COMPATIBLE SYSTEMS

SUPPORTED SYSTEMS	SUCH AS
Device with BLE	BLE 4.2 equipment is available, and the communication time to obtain data is long; BLE 5.0 equipment is recommended to obtain the fastest historical data speed.
iOS 11.0 and above	iPhone 8/8Plus, iPhone x/xr/xs/xs max, iPhone SE/SE2, iPhone 11/11 pro/11 pro max and above
Android 7.0 and above	LG、Samsung、Xiaomi MIUI8, HUAWEI EMUI5.0, Oneplus H2OS 3.0, Vivo FuntouchOS 4.0, OPPO ColorOS 3.1and above.

Note: (1)IOS 11.0 and above can run MSensor APP.

BLE 4.2 is supported only for iOS 8.0 or Android7.0 or above (the system version when the phone is launched). As in the iphone6.

BLE 5.0 is supported for iOS 11 or Android8.0 (the system version when the phone is launched). As in the iphone8.

The non-first version of the system needs to be self-tested and verified.

INSTRUCTION

* **Boot:**

Correct install the battery, pull out the insulation piece that is, power on.

* **Shut down:**

Removing the battery means a power-off and shutdown.

* **Replace the battery:**

Slide the bottom plate to the limit port to remove the cover plate. After replacing the button battery, the battery will be started when the battery is installed.

* **Anti-demolition alarm:**

In the boot state, the disassembly alarm is triggered, the broadcast Combination Frame and the red light flashes.

* **Open light effect:**

When the lamp effect is on, the door magnetic switch triggers the blue lamp flashing from close to on. It can be opened through APP or factory burning record.

* **Low power alarm:**

When the light efficiency power is low, the product red light flashes. Info Frame Incltains quantity information.

* **Historical Data View & Export:**

The device records historical data after the APP is connected and the storage switch is turned on. After clicking Sync data, you can choose to export the historical data table file.

* **Refer to MSensor Operation Guide for adjusting broadcast mode, adjusting broadcast parameters, setting working period, OTA upgrade.**

PRECAUTIONS

- * Before use, products should be stored under normal ambient temperature. Please do not turn on the device before use, which may reduce the service life.
- * Under the default configuration and normal temperature environment (25°C), the battery can last for about 13 months in the laboratory test. The battery life depends on the actual environment and can fluctuate.
- * Metal has an impact on the equipment, and the effect of the test when installed in the metal place meets the requirements;
- * This equipment is sensitive to the magnetic field, please avoid the strong magnetic interference environment;
- * Sensors should avoid water immersion or long-term use under high humidity and condensation conditions;
- * When the product exceeds the operating temperature range, product damage may result;
- * It is suggested to use the equipment indoors to avoid product damage caused by accidental water intake;
- * Please do not disassemble the main casing without permission. Our company is not responsible for any damage.

DEPLOYMENT INSTRUCTION

Double-sided tape installation

Applicable materials: aluminum, galvanized steel, enameled steel, stainless steel, ceramic, glass/epoxy, acrylic, PBT, ABS, PC, rigid PVC, and other material surfaces.

Paste requirements: Clean the paste surface and ensure that the paste surface is dry and dust-free before applying.

Note: After pasting, press the device for one or two seconds by hand, and repeat several times to make the double-sided tape and the pasting surface better bond. If you need to use it in a low-temperature environment, please use a hot air blower or a hairdryer to slightly heat the sticking surface before sticking to increase the stickiness; or stick it at a suitable temperature for more than half an hour, and then move it to the working environment.

CERTIFICATIONS



* Note: For other certifications, please contact our business team.

PACKAGING

Details	Mini Box (Gift Box)	Inner Carton	External Box
Pictures			
Quantity	1pcs	32pcs	320pcs
Size	60 x 77 x 20mm	306 x 110 x 72mm	320 x 235 x 400mm

QUALITY ASSURANCE

The factory has already obtained the certification of ISO9001 Quality System. Each product has been strictly tested (tests include transmission power, sensitivity, power consumption, stability, aging, etc.).

Warranty Period: 12 months from the date of shipping (battery and other accessories excluded).

DECLARATION

Statement of Rights:

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