Magnetic Contact Switch

Featuring LoRaWAN®

WS301



Milesight WS301 simply enables you to know when someone enters the office/building through door/window or something has been moved. The minimal magnet is placed inside the portable part, while the sensor is inside the fixed part that can be attached on door/window or other objects. With LoRa technology, one of the most low power consumption technologies, Milesight WS301 can work up to almost 5 years without bothering to replace battery. Compliant with Milesight LoRaWAN® gateway and Milesight Development Platform, WS301 will surely monitor the real-time open/close status and receive alarms.

With a style of minimalism and compact size, the wire-free WS301 can be easily mounted on the doors, panes, or cabinets, greatly providing real applications for smart homes, smart office or smart factories.

◆ Features

- Suitable for various doors/windows of different materials
- Support mounting tamper detection
- LED for network status, open/close status, tamper and low battery indication
- Ultra-wide-distance transmission up to line of sight of 15 km
- Built-in 1200 mAh replaceable battery can work continuously for more than 5 years
- Equipped with NFC for one touch configuration
- Support Milesight D2D protocol to enable ultra-low latency and directly control without gateway

- Function well with standard LoRaWAN® gateways and network servers
- Compliant with Milesight IoT Cloud and Milesight Development Platform

◆ Specifications

Wireless Transmission	
Technology	LoRaWAN®, Milesight D2D
Antenna	Internal Antenna
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
Tx Power	16 dBm (868 MHz)/22 dBm (915 MHz)/19 dBm (470 MHz)
Sensitivity	-137 dBm @300bps
Mode	OTAA/ABP Class A
Measurement	
Detection Distance	20 mm
Others	
Button	1 × Reset Button (Internal), 1 × Tampering Button
LED Indicator	1 × Status/Alarm Indicator
Software	
Configuration	NFC Configuration via Mobile App
Advanced Feature	Milesight D2D Controller, Tamper Alarm, Open/Close Status Alarm
Physical Characteristics	
Power Supply	1 × 1200 mAh ER14250 Li-$SOCl_2$ Battery
Battery Life* (1080 min interval + 30 triggers per day, 25°C)	Around 6.8 Years (SF7, EU868) Around 4.2 Years (SF10, EU868) Around 6.8 Years (SF7, US915) Around 3.5 Years (SF10, US915)
Operating Temperature	-20°C to +60°C
Relative Humidity	≤90% (non-condensing)
Ingress Protection	IP20
Color	White
Weight	Sensor: 27.9g (Battery Included) Magnet: 13.7g
Dimension	Sensor: 50.5 × 31 × 19 mm (1.99 × 1.22 × 0.75 in) Magnet: 50.5 × 13.5 × 13 mm (1.99 × 0.53 × 0.51 in)
Installation	On the flat surfaces with screws or 3M tapes
Approvals	

Regulatory	CE, FCC, Telec, LoRaWAN® Certified, ISED
Environmental	RoHS

* Tested under laboratory conditions and for guideline purposes only.

◆ Dimensions(mm)

