

Door Sensor

OVERVIEW:

The Dragino DS03A series is a [Door Sensor](#) for Internet of Things solution. It detects [door open/close status](#) and uplinks to IoT server via [LoRaWAN](#), [NB-IoT](#) or [CAT-M1](#) network. User can see the door status, open duration, open counts in the IoT Server.

The Dragino DS03A series will send periodically data every 2 hours as well as for each door open/close action. It also counts the door open times and calculates the last door open duration. Users can also disable the uplink for each open/close event, instead, it can count each open event and uplink periodically.

It supports [Datalog Feature](#), it can save the data when there is no network and uplink when network recover.

The Dragino DS03A series has the [Open Alarm Feature](#), user can set this feature so the device will send an alarm if the door has been open for a certain time.

It is designed for outdoor use. It has a weatherproof enclosure and industrial level battery to work in low to high temperatures.

It supports [BLE configure and wireless OTA update](#) which make user easy to use.

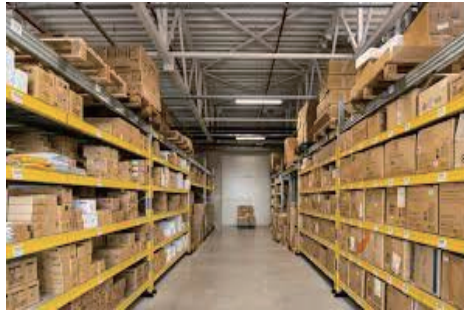
The Dragino DS03A series is powered by [8500mAh Li-SOCI2 battery](#) or solar panel with [Li-ion battery](#), it is designed for long-term use up to several years.



Application:



Supermarket



Warehouse



Garage



Villa



Home Area















Store

Dragino Technology Co., Limited

Room 202, Block B, BCT Incubation Bases (BaoChengTai), No.8 CaiYunRoad
LongCheng Street, LongGang District ; Shenzhen 518116, China
Direct: +86 755 86610829 | Fax: +86 755 86647123

WWW.DRAGINO.COM
sales@dragino.com

Model Variants

Variants	DS03A-LB	DS03A-LS	DS03A-NB	DS03A-NS	DS03A-CB	DS03A-CS
Connectivity						
Configure Method	TTL, BLE, LoRaWAN	TTL, BLE, LoRaWAN	TTL, BLE, NB-IoT	TTL, BLE, NB-IoT	TTL, BLE, NB-IoT, LTE-M	TTL, BLE, NB-IoT, LTE-M
Upgrade Method	TTL, BLE, LoRa	TTL, BLE, LoRa	TTL, BLE	TTL, BLE	TTL, BLE	TTL, BLE
Features	Sensor /Probe: * Door Open/Close detect * Door open/close statistics * Datalog Feature, Open Alarm Feature General Features: * Ultra-low power consumption * Support Bluetooth v5.1 remote configure and OTA update firmware * Uplink on periodically * GNSS for Location Report (for -CB & -CS models only) * Downlink to change configure					
Battery & Power	 * 8500 mAh Li/SOCI2 Battery	 * Solar + 3000 mAh Li-ion Battery	 * 8500 mAh Li/SOCI2 Battery	 * Solar + 3000 mAh Li-ion Battery	 * 8500 mAh Li/SOCI2 Battery	 * Solar + 3000 mAh Li-ion Battery
Power Consumption	* Sleep Mode: 5uA @ 3.3v * LoRa Transmit Mode: 125mA @ 20dBm, 82mA @ 14dBm	* Sleep mode: 74uA@3.8V * LoRa Transmit Mode: 206mA@14dBm, 236mA@20dBm	* Sleep mode: 14uA@3.3V * Max Transmit power: 350mA@3.3V	* Sleep mode: 74uA@3.4V * Max Transmit power: 350mA@3.4V	* Sleep mode: 14uA@3.3V * Max Transmit power: 350mA@3.3V	* Sleep mode: 74uA@3.4V * Max Transmit power: 350mA@3.4V
Supply Voltage	2.5v ~ 3.6v	3.7v ~ 4.2v	2.5v ~ 3.6v	3.7v ~ 4.2v	2.6v ~ 3.6v	3.7v ~ 4.2v
Operating Temperature	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C

Battery & Enclosure Option:

Li-SOCI2 Battery & Enclosure:



- Li/SOCI2 un-chargeable battery
- Capacity: 8500mAh
- Self-Discharge: <1% / Year @ 25°C
- Max continuously current: 130mA
- Max boost current: 2A, 1 second



Solar Version & Enclosure:

- 3000mAh Re-chargeable battery
- 0.9W on board solar pannel Suitable to used in the place where sun is sufficient



- This icon means support location feature by: GPS/ GLONASS/BDS/Galileo/ QZSS

Wireless Option:



- LoRaWAN 1.0.3 Class A
- Bands: CN470/EU433/KR920/US915/ EU868/AS923/AU915/IN865
- OTAA or ABP Mode.
- World Wide Unique LoRaWAN Key
- RX sensitivity: down to -139 dBm.
- Max +22 dBm - 100 mW RF output



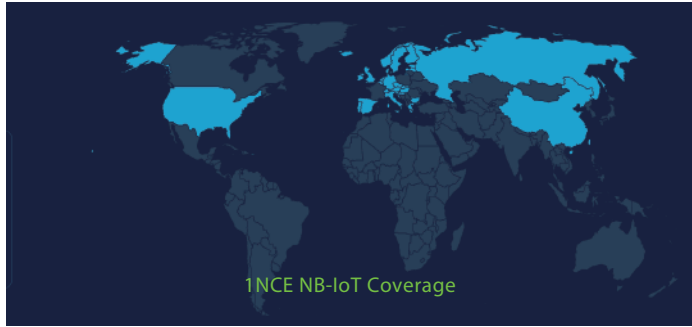
- CAT NB2 Bands:
- For -NB & -NS: B1/B2/B3/B4/B5/B8/B12/B13/ B17/B18/B19/B20/B25/B28/B66/B70/B85
- For -CB & -CS: B1/B2/B3/B4/B5/B8/B12/B13/ /B18/B19/B20/B25/B28/B66/B71/B85
- Uplink via MQTT, MQTTs, TCP, UDP or CoAP
- Multiply Sampling and one uplink



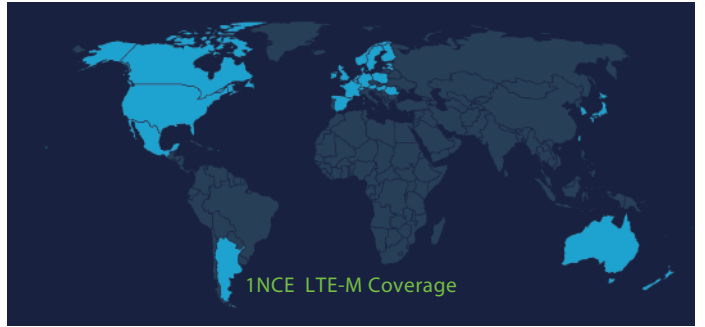
- CAT-M1 / LTE-M Bands: B1/B2/B3/B4/B5/ B8/B12/B13/B18/B19/B20/B25/B26/B27/ B28/B66/B85
- Uplink via MQTT, MQTTs, TCP, UDP or CoAP
- Multiply Sampling and one uplink

What is 1T version for NB-IoT version?

The 1T version of NB-IoT Door Sensor is with a) 1NCE SIM Card & 2) ThingsEye Pre-configured.
1NCE SIM Card (10 Years Cellular service with 500MB Data Traffic, Enough for devices to uplink 10 years at 1hour interval).



NB-IoT Network : Austria, Belgium, Bulgaria, China, Croatia, Czech Republic, Denmark, Estonia, Finland, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Malta, Netherlands, Norway, Portugal, Puerto Rico, Russia, Slovak, Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, USA, US Virgin Islands.

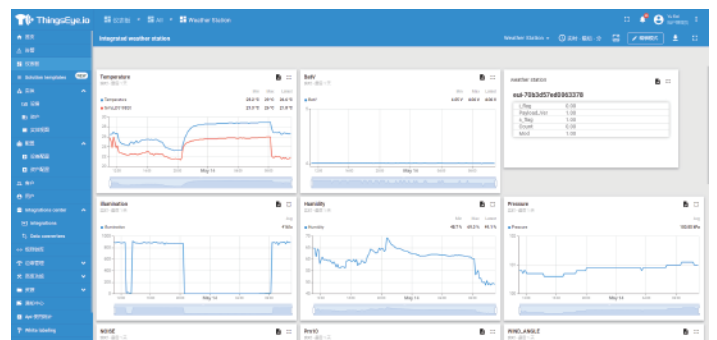


LTE-M Network : Argentina, Austria, Australia, Belgium, Canada, Denmark, Estonia, Finland, France, Germany, Great Britain, Hungary, Ireland, Japan, Jersey, Korea, Republic of, Latvia, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Puerto Rico, Romania, Spain, Sweden, Switzerland, Taiwan, USA, US Virgin Islands.

ThingsEye.io platform:

1T version with ThingsEye IoT service pre-installed. This save a lot of work from user side to configure IoT server.

Below is Dash Board is the demo in ThingsEye.io.



Order Info:



Part Number: DS03A-LB-XX

XX: The default frequency band

- XX: Frequency Bands, options: EU433,CN470,EU868,IN865,KR920,AS923,AU915,US915

Part Number: DS03A-LS-XX

XX: The default frequency band

- XX: Frequency Bands, options: EU433,CN470, EU868,IN865,KR920,AS923,AU915,US915



Part Number: DS03A-NB-XX

XX:

- **GE:** General version (Exclude SIM card)
- **1T:** with 1NCE* 10 years 500MB SIM card Pre-configure to ThingsEye server

Part Number: DS03A-NS-XX

XX:

- **GE:** General version (Exclude SIM card)
- **1T:** with 1NCE* 10 years 500MB SIM card Pre-configure to ThingsEye server



Part Number: DS03A-CB-XX

XX:

- **GE:** General version (Exclude SIM card)
- **1T:** with 1NCE* 10 years 500MB SIM card Pre-configure to ThingsEye server



Part Number: DS03A-CS-XX

XX:

- **GE:** General version (Exclude SIM card)
- **1T:** with 1NCE* 10 years 500MB SIM card Pre-configure to ThingsEye server

Dragino Technology Co., Limited

Room 202, Block B, BCT Incubation Bases (BaoChengTai), No.8 CaiYunRoad
LongCheng Street, LongGang District ; Shenzhen 518116,China
Direct: +86 755 86610829 |Fax: +86 755 86647123

WWW.DRAGINO.COM
sales@dragino.com