



dSens

Bluetooth 5.2 Door Sensor

Edge Semiconductors' dSens wireless door sensor offers enhanced visibility into trailer and container operations, bolstering cargo security. It promptly detects door openings and closures, empowering fleet operators to monitor scheduled access to cargo areas and respond promptly to any unauthorized entries.



Bluetooth[®] 5.2 Connectivity

Report to nearby Bluetooth Gateway through a defined communication structure in both data stream through advertisement and connection profiles.



Easy Installation and Maintenance With no wires involved, installation, maintenance, and repairs are hassle-free, making it perfect for large-scale deployments. Expedite setup using our user-friendly Field Support Tool mobile app for device configuration and assistance.



Tamper Proof

Tamper-Proof Patented Design ensures secure detection of door status, equipped with the capability to promptly alert against any tampering attempts



Ultra-Rugged Design

Rugged Design Engineered with an IP69 rating, it withstands tough operating conditions including dust, humidity, water, shock, and vibration, ensuring reliable performance in virtually any environment.



Extreme Battery Life

Longevity! Enjoy up to ten years of battery life for efficient Bluetooth communication, minimizing upkeep requirements

Connectivity

Bluetooth®	Bluetooth Low Energy (BLE) version 5.2 Low power, short range protocol using 2.4GHz band. Report to nearby Bluetooth Gateway through a defined communication structure in both data stream through advertisement and connection profiles. The transmission power is set to +8dBm capable of ensuring reliable communication for most trailers and trucks.
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Battery & Power Management

Lifetime	10 years
Battery Type	Lithium Thionyl Chloride (LTC) 3.6V, 5400 mAh
Efficient Power Management	Efficient Power Management through advanced algorithms enabling an average current of 45µA.

Mechanical / Design

Dimensions	
Sensing Unit	92 x 60 x 19 mm (3.6 x 2.3 x 0.75")
Magnet	84 x 30 x 14 mm (3.3 x 1.2 x 0.55")
Weight	
Sensing Unit	114 g
Magnet	44 g
Housing	Valox FR Resin V3900WX and filled with high grade potting compound.
IP Rating	IP69K rated housing for both sensor body and magnet unit ensures device can withstand washdown at pressures of 80 to 100 bar/1,160 to 1,450 PSI, in phases of 14 to 16 l/min, and at temperatures up to 176°F/80°C.
Operating Temperature	-40°C to + 85°C (-40°F to +185°F)

Bluetooth® Antenna	Internal
Compatibility	Compatible with both trailers Roll Up and Swing Doors.
Tampering Detection	Embedded Tampering Detection Sensor
Electronic Temperature Sensor	Embedded. The device reports internal temperature which provides an indication of the electronic enclosure temperature and a image of the induced external ambient temperature.
Voltage Gauging	Internal voltage gauging included.
Shipping Mode	Shipping Mode is automatically enabled in the factory and ends once a change locking or unlocking of the door is sensed. Shipping mode could be reactivated through a Bluetooth Low Energy special command.

Installation

Swing Doors	Through 4 stainless steel screws / rivets.
Roll Up Doors	Through 4 + 4 stainless steel screws/rivets and separately ordered mounting bracket.

Warranty

Manufacturer's Warranty	One Year Manufacturing Warranty / From Shipment
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Ordering Information

EDS-100-001	Swing Door Package Door Sensor Magnet Unit
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EDS-100-002	Roll Up Door Package Door Sensor Magnet Unit Mounting Bracket 2 Stainless Steel Screws
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Planned Certifications

Bluetooth®	FCC Bluetooth Certification 47 CFR 15 / RoHS
Vibration	SAE J1455
Shock	MIL-STD-810G
Others	UL CE Mark: EN 301 489-17 / EN 301 489-1 (EMC) / IEC 62368



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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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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.

FCC Radiation Exposure statement

The device has been evaluatec to meel general RF exposure requirement. The device can be used in portable exposure condition without restriction.