



LoRaWAN® Door Status Sensor

MacSync LDSS X1

LoRaWAN® door status sensor for real-time open/close monitoring with long-range wireless connectivity and ultra-low power operation.



Introduction

The MacSync LDSS X1 is an industrial-grade LoRaWAN® Door Status Sensor designed for continuous real-time monitoring of door open/close status across warehouses, cold storage facilities, server rooms, smart buildings, industrial plants, retail outlets, utility rooms, and remote infrastructure applications.

Built with ultra-low power architecture and long-range LoRaWAN® connectivity, the device enables organizations to monitor unauthorized access, track door activity, improve operational visibility, and automate alert-based security workflows across distributed facilities.

Features

- Real-Time Door Open / Close Status Monitoring
- Instant Event-Triggered Door Alerts
- Ultra-Low Power Wireless Sensor Architecture
- Designed for Industrial & Commercial Deployments
- Magnetic Reed Switch-Based Detection Technology
- Compatible with Public & Private LoRaWAN® Networks & Macnman MacTalk Protocol
- Continuous 24x7 Door Activity Monitoring

Key Advantages

- Improves Facility Security & Access Monitoring
- Ideal for Warehouses, Cold Storage & Server Rooms
- Enables Instant Alerts for Unauthorized Access Events
- Supports Smart Building & Industrial IoT Infrastructure
- Reduces Manual Security Inspection Requirements

Door Sensor Measurement Specifications

Detection Technology	Magnetic Reed Switch Detection
Door Status Detection	Open / Close Status
Trigger Distance	15 mm
Event Reporting	Instant Event-Based Uplink Transmission
Tamper Detection	Supported with Software
Door Activity Logging	Supported with Timestamp
Detection Accuracy	> 99% Reliable Detection
Operating Temperature Range	-20°C ~ +50°C

Wireless Specifications

Wireless Protocols	LoRaWAN® (v1.0.4), Macnman MacTalk Protocol
Antenna	Internal high-efficiency antenna
Supported Bands	IN865 / RU864 / EU868 / US915 / AU915
Tx Power	23 dBm @ 865 MHz
Sensitivity	-137 dBm @ 300 bps
LoRaWAN® Class	Class A (Default), Configurable to Class C via Maya
Device Activation	OTAA
Supported LNS	Private LNS ,ChirpStack ,The Things Network, MQTT, Orbiwise

Device Management

Configuration Method	Via Macnman Maya Android App
Local Configuration	BLE-Based Local Configuration
Remote Configuration	Over-the-Air Configuration (Downlink Commands)
Status LED	1 × Internal Multi-Color LED

Device Configuration Parameters

Data Reporting Mode	Periodic / Event-based / Hybrid
Transmission Interval	Independent uplink interval for optimized power consumption
Threshold-Based Alerts	Configurable Door Status Alerts for Event-Triggered Transmission
Sampling Interval	Configurable data acquisition interval (e.g., 1 min to 24 hours)

Power & Battery Performance

Power Supply	Integrated Battery - 19,000 mAh
Battery Type	Lithium Thionyl Chloride (Li-SOCl ₂)
Estimated Battery Life at 25 °C	
50 Events / Day	~11 Years
100 Events / Day	~6 Years
250 Events / Day	~2.5 Years

Physical & Environmental Specifications

Enclosure & Mechanical

Material	Glass-Filled Nylon
Protection Rating	IP65
Dimensions	152 mm X 62 mm X 43 mm
Weight	~175 g

Mounting & Installation

Wall - Mounted Installation	Supported , With Clip
Pole - Mounted Installation	Supported , Without Clip

Environmental Conditions

Operating Temperature	-40°C to +80°C
Operating Humidity	0% to 95% RH (Non-Condensing)

Regulatory Certifications & Compliance

Wireless Certification	WPC
Environmental	RoHS Compliant

What's in the Box?

- MacSync LDSS X1 LoRaWAN Door Status Sensor
- Mounting Clip
- User Manual
- Warranty Card
- IP68 Cable Extender *
- Mounting Screws
- Power Adapters *

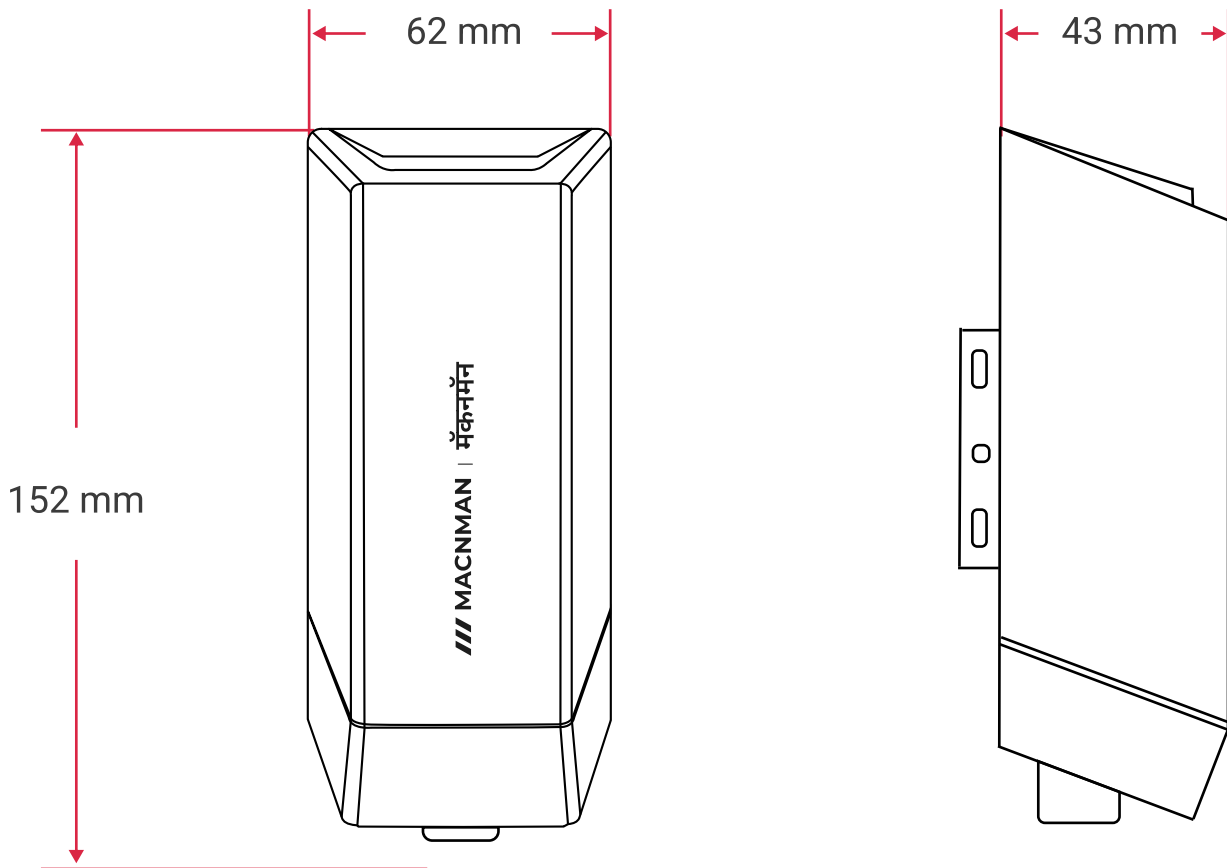
Models & Ordering Information

Variant Name	Power Source	SKU
MacSync LDSS X1 BO	Integrated Battery - 19,000 mAh	840

Notes

- Power-operated variants require external DC power input & external sensor probe
- (*) Marked accessories must be purchased separately

Device Dimensions






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Say Hello 🙌

-  www.macnman.com
-  info@macnman.com
-  +91 7972856163
-  Office -15, 635 1B, Bibwewadi, Pune,
Maharashtra 411037

Support Mails

-  chat@macnman.com
-  helpdesk@macnman.com
-  support@macnman.com

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