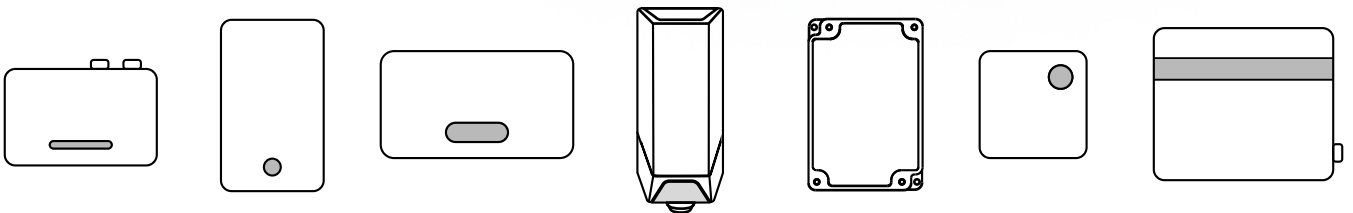


LoRaWAN Door Sensor

The next **evolution** in IoT

Model: MACDS02



MacSync

Modules

Gateways

Controllers

Customise

Macnman LoRaWAN Door Sensor

OVERVIEW

The Macnman MACDS02 is a LoRaWAN-based door/window contact sensor designed to detect open/close status & wirelessly transmit real-time updates to IoT platforms. It is built for low-power operation and is ideal for applications requiring long battery life and robust wireless communication.

The MACDS02 is powered by 2 x AAA batteries and supports up to **60,000+ uplink transmissions**, ensuring years of maintenance-free operation. The rugged enclosure makes it suitable for both indoor and semi-outdoor installations.

Users can monitor door status, opening duration, and cumulative event counts remotely. The device supports configurable alarms, periodic reports, and status uplinks on door open/close events.

Each unit comes with a unique DevEUI/AppEUI/AppKey pre-programmed for fast and secure onboarding to LoRaWAN networks.

○ FEATURES

LoRaWAN & Class	LoRaWAN v1.0.4 & Class A device
Product Brand	Magnetic door/window contact detection
Updates	Configurable periodic uplink interval
Alerts	Open duration alert threshold
Modes	Open/Close event tracking with timestamp
Cycles	Up to 60,000+ uplinks per battery cycle Urban
Activation	OTAA

Device Specifications

General Specifications

Product Part Number	MACDS02 / 03 / 04
Product Brand	Macnman Technologies Pvt Ltd
Interface Available	<div>Temperature Sensor</div> <div>Humidity Sensor</div>
BLE	BLE 5.3 - nRF5281 Series
LoRaWAN	STM32WL Series
LoRaWAN range	<div>2 Km Urban</div> <div>6 Km LoS</div>
Cloud platforms	<div>TTN</div> <div>Chirtstack</div> <div>Helium</div> <div>loriot</div> <div>Orbiwise</div> <div>Private</div>

LoRaWAN Specifications

LoRaWAN Class	<div>Class A</div> <div>Class C</div>
Frequency	<div>EU868</div> <div>IN865</div> <div>US915</div> <div>AU915</div>
Activation Type	<div>OTAA</div>
Heartbeat Period	30 Sec to 24 Hrs
LoRaWAN Antenna	Internal
Sensitivity	-138 dBm

○ Battery Specifications

Power options	In-built battery
Battery life	3 years 1 uplink / 5 mins
Battery capacity	2 x AAA batteries
Battery Type	Alkaline

○ Physical Properties

Mounting Methods	Window Walls Door Walls
Dimensions	45 mm X 23 mm X 19 mm 35 mm X 23 mm X 19 mm
Weight	80 gms (with battery)
Shell	Waterproof IP65 weather resistant

○ Operating Conditions

Operating temperature	-35 C +65 C
Storage temperature	-40 C +125°C
Relative Humidity	95% (non-condensing)
Casing Built	Suitable for indoor, outdoor and harsh environments such as high UV exposure, heavy rain, dusty conditions etc

○ Default Parameters

Frequency plan	IN865-868
Adaptive data rate	On
Confirmed Uplinks	Off
Heartbeat Rate	10 mins

To change any parameter of MacSync you need an Macnman Maya app.