

ParkNode Gen1 Overview

The MacDS Gen2 is a compact, battery-powered LoRaWAN® sensor designed to detect door or window open/close status and wirelessly transmit updates to cloud-based platforms. Built for ultra-low power operation, it delivers exceptional performance and longevity in both indoor and semi-outdoor environments.

Powered by 2 × AAA batteries, the sensor supports 60,000+ uplink transmissions, enabling multi-year operation without the need for maintenance. With its rugged design and easy mounting, MACDS02 is ideal for smart building access monitoring, security systems, and occupancy analytics.

Sensing

Magnetic Sensing

Wireless
Technology



Features

High reliability

Accuracy of Magnetic detection is over 99%

Temperature & humidity measurement

Optional Sensing for Condition Monitoring

Easy Surface Mounting

Magnetic + 3M Tape

Supports periodic, threshold-based, & event-driven uplinks

High Reliability

Accuracy of dual-mode detection is over 99%

Built-in lithium battery

Up to 05+ years depending on settings

Supports Macnman Beam Protocol

Direct control, & local device-to-device actions

Secure onboarding with pre-flashed DevEUI / AppEUI / AppKey

Optional Onboard Data Buffering

To prevent data loss in case of network downtime

Compatible with all LoRaWAN® network servers & gateways

Specifications

Measurement

Sensing Type	Magnetic Contact Type Sensing
Alerts	Open duration alert threshold
Modes	Open/Close event tracking with timestamp
Cycles	60,000 + Uplinks per Battery

Wireless Transmission

Technology	LoRaWAN® (v1.0.4), Macnman Beam Protocol
Antenna	Internal high-efficiency antenna
Supported Bands	IN865 / RU864 / EU868 / US915 / AU915 / KR920 / AS923-1/2/3/4
Tx Power	16 dBm @ 868 MHz 20 dBm @ 915 MHz 19 dBm @ 470 MHz
Sensitivity	-137 dBm @ 300 bps
Activation	OTAA / ABP
LoRaWAN® Class	Class A (default), Configurable to Class C via Maya

Led Status

LED Type	1 Internal Multi-Color LED - Not Visible on surface
Solid Blue	Device is connected with Maya App
Flashing Blue	OTA (Over-the-Air) update in progress
Slow Blinking Green	Attempting to connect to the LoRaWAN® network
Single Red Blink	A confirmed parameter of MacSync is being modified

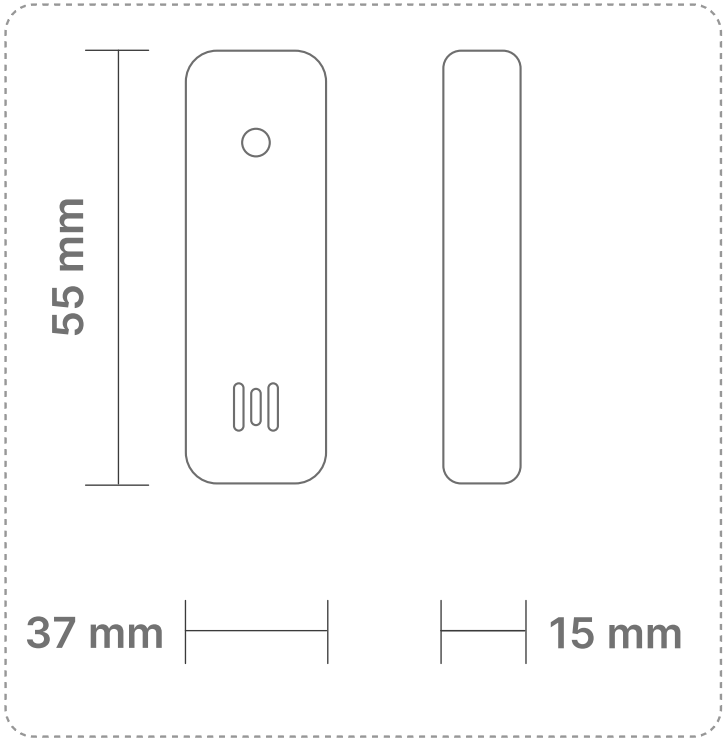
Configuration

Configuration	Via Macnman Maya Android App
Maya Fatures	Threshold / Trigger / Sample based alarm triggers
Stored Records	30,000 Records (accessible via Maya) (optional)
Remote Configuration	Yes - JSON format Data

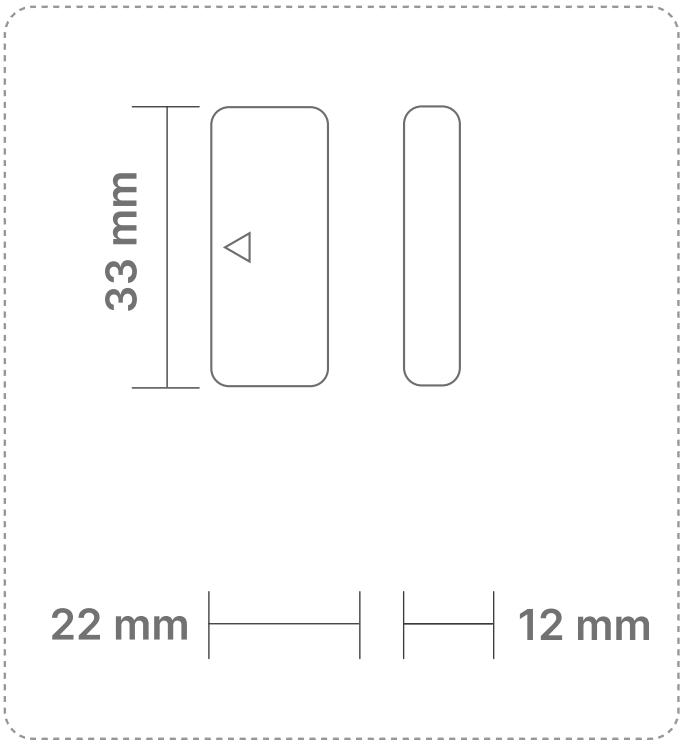
Physical Characteristics

Power Supply	Inbuilt Battery - 2,000 mAh
Operating Temp	-40°C to +80°C
Humidity Range	0% to 100% RH (non-condensing)
Ingress Protection	IP35 standard
Housing Material	ABS Plastic
Color	Matte Black
Weight	~ 120g (with 2,000 mAh battery)
Dimensions	37mm x 55mm x 15mm(First) , 23mm x 33mm x 12mm(Second)
Installation	Surface-mounted type

Device Dimensions



A. Device First



B. Device Second

y to serve you. तुमची सेवा करण्याची संधी दिल्याबद्दल धन्यवाद. మీకు సేవ చేసే అ
के अवसर के लिए धन्यवाद भवतः सेवायाः अवसरस्य कृते धन्यवादः તમારી સેવા કરવાની

Say Hello 🙌

- 🌐 www.macnman.com
- ✉ info@macnman.com
- 📞 +91 7972856163
- 📍 SHOP-15, 635 1B, Bibwewadi, Pune,
Maharashtra 411037

Support Mails

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

This manual and all its contents are the intellectual property of Macnman Technologies Pvt. Ltd. and are protected under Indian copyright laws and applicable international conventions.

All trademarks, certifications, and logos mentioned in this document or related products are used with appropriate licensing. These may include, but are not limited to, certifications such as CE, FCC, RoHS, REACH, BQB, WEEE, and others. Ownership of trademarks, logos, and trade names remains with their respective owners. For instance, the Bluetooth® trademark and logo are the property of Bluetooth SIG, Inc. Other trademarks belong to their rightful proprietors.

Given the compact size of the module, the "®" symbol is omitted from Bluetooth-related trademarks in compliance with applicable regulations.

Macnman Technologies Pvt. Ltd. reserves the right to modify the content of this manual to align with advancements in technology. Updated versions may be released without prior notification. Unauthorized modification, reproduction, or use of part or all of this manual without written consent from Macnman Technologies Pvt. Ltd. is strictly prohibited. Legal action will be taken against violators in accordance with Indian law.

By using this manual, you agree to comply with the terms stated herein.