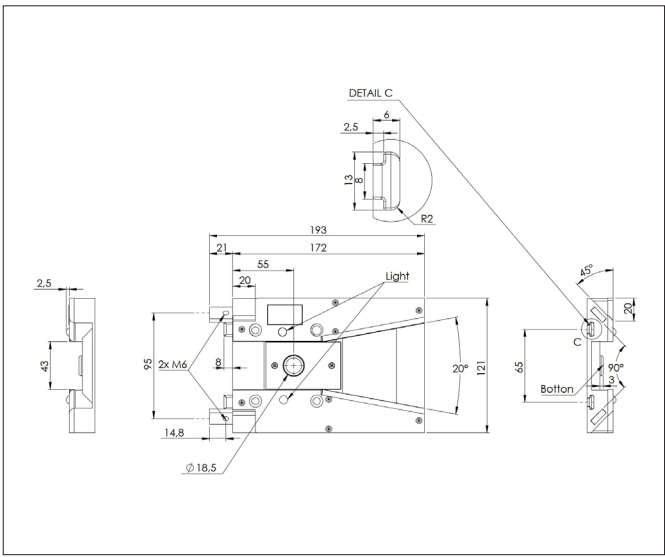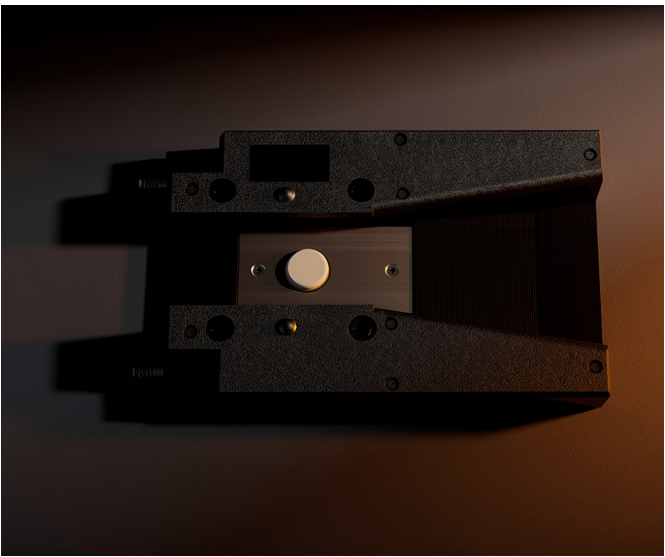## Description

The SMAVOO Trolley sensor is designed to streamline warehouse logistics by monitoring the movement and positioning of trolleys. It can detect the absence or presence of a trolley and count how many trolleys have been inserted. This enables automated tracking and optimization of material flow, ensuring efficient utilization of warehouse space. Additionally, its hybrid communication options (WiFi & LoRaWAN) provide flexible connectivity for various industrial environments during all operational processes.

## Key Features

**01.** Real-Time Trolley Visibility

**02.** Compact. Durable. Plug-and-Play.

**03.** Automation-Ready Connectivity

**04.** Smooth Roll Detection with Optical Feedback

| Enclosure | Dimensions | 193 mm x 121 mm x 23 mm |
| --- | --- | --- |
| | Material & Color | Synthetic material, black |
| | Installation | Insertion into a T-slot rail, floor mounting via mounting tabs |
| Power Management | Power Supply | 2x AA batteries |
| | Lifetime | Up to one year with 30 actuations per day |
| Temperature Regulations | Operating Temperature | -10 °C to +40 °C |
| | Ingress Protection (IP) | IP40 |
| Quality & Compliance | Certifications | CE |
| | Warranty | 24 months |
| Device Functionality | LED | 2x RGB LEDs |
| | Button | Wheel detector |
| | External Connector | Service interface |

SMAVOO

Subject to errors and
technical changes

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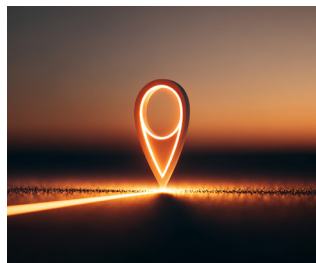E-Mail: info@smavoo.com
www.smavoo.com

## ONE.CORE Function

SMAVOO ONE.CORE is the heart of the SMAVOO ecosystem — a fully modular sensor platform designed specifically for demanding industrial environments. Unlike conventional IoT devices with fixed feature sets, ONE.CORE adapts precisely to your requirements through interchangeable communication modules, configurable sensor interfaces, and edge-computing capabilities. Born out of frustration with proprietary systems that lock companies into inflexible technologies, ONE.CORE is built on open standards and a future-proof design. Start with exactly what you need today and expand the platform seamlessly as your business grows and evolves naturally — all without having to replace your hardware investment.
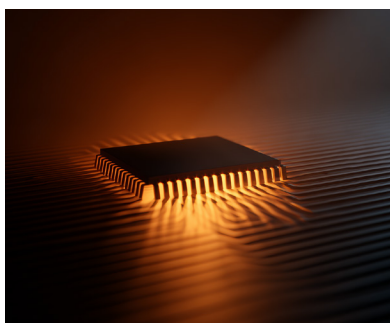
## ONE.CORE Key Features



### 01.
Modular Communication: WiFi, LoRaWAN, Bluetooth Low Energy (BLE)

### 02.
Plug-and-Play Interface for Sensors (RFID, Barcode, Environment, Movement)

### 03.
Designed for Edge Intelligence, Buffering, and Fail-Safety

## ONE.CORE Multiband

| Core.CPU | 240 MHz Dual Core CPU | ADC voltage monitoring (battery) |
| --- | --- | --- |
| | 520 KB SRAM, 4MB flash | Secure boot with flash encryption |
| | Hardware encryption (AES, RSA, ECC, HASH) | |
| | Ultra low power consumption | |

| Core.WiFi | WPA2 Enterprise (EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST) | |
| --- | --- | --- |
| | IEEE 802.11 b/g/n, up to 150 Mbps | |
| | X.509 certifications (4096-bit) | |
| | Firmware upgrade via Over-the-Air Update (OTA) | |

| Core.LoRaWAN (optional) | CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4 | |
| --- | --- | --- |
| | FSK, GFSK, MSK, GMSK, LoRaTM and OOK Modulation | |
| | 127 dB Dynamic Range RSSI | Over the Air Activation (OTAA) |
| | Activation by Personalization (ABP) | Advanced Encryption Standard (AES) |
| | −144 dBm sensitivity | IEEE802.15.4g |

| Core.BLE (optional Core.PDI) | Compliant with Bluetooth v4.2 BR/EDR and Bluetooth LE specifications |
| --- | --- |
| | NZIF receiver with −94 dBm Bluetooth LE sensitivity |
| | Adaptive Frequency Hopping (AFH) |
| | Bluetooth 4.2 BR/EDR and Bluetooth LE dual mode controller |
| | Multi-connections in Classic Bluetooth and Bluetooth LE |
| | Simultaneous advertising and scanning |