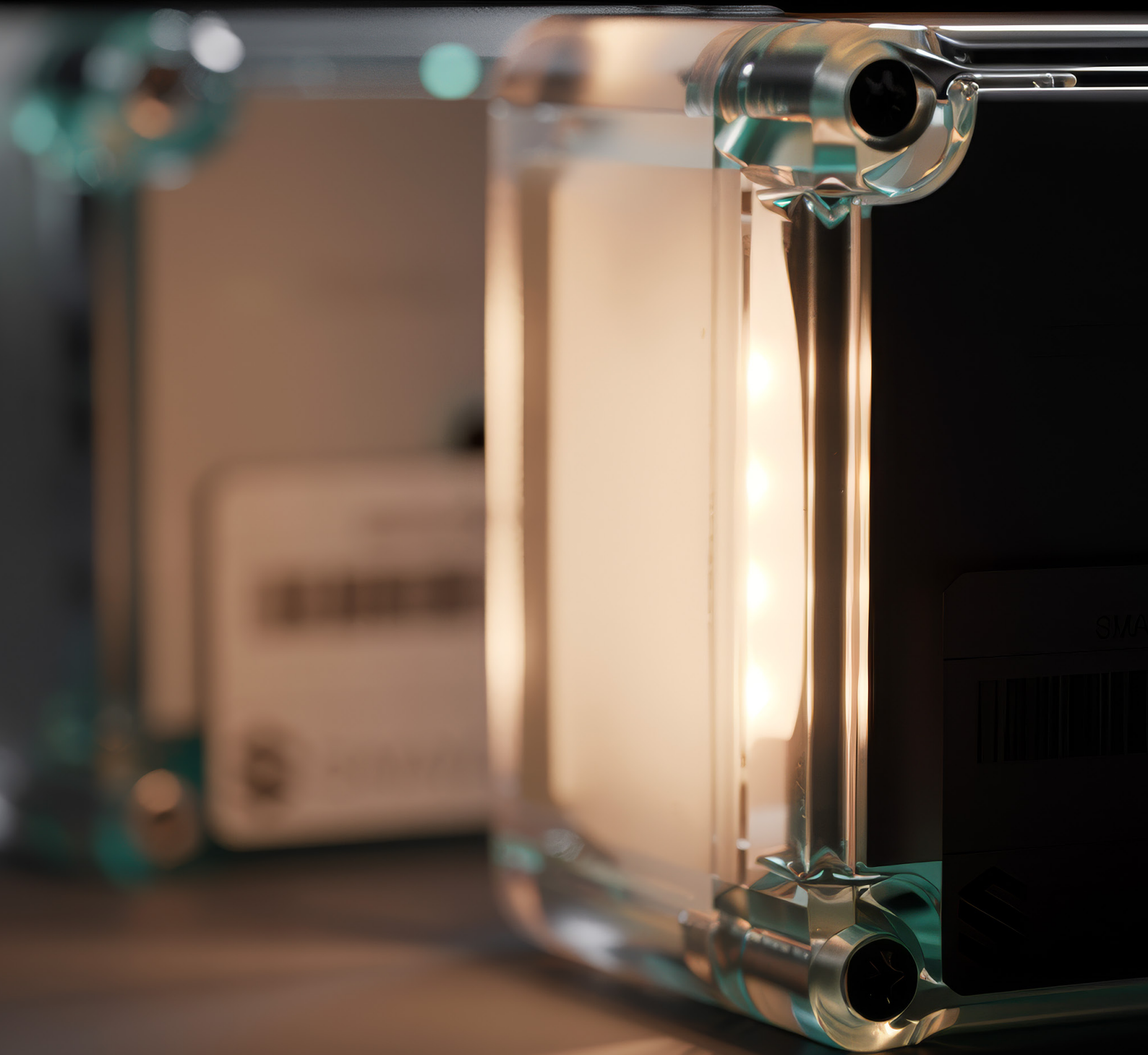Professionally Lighting Up Your *Operations*
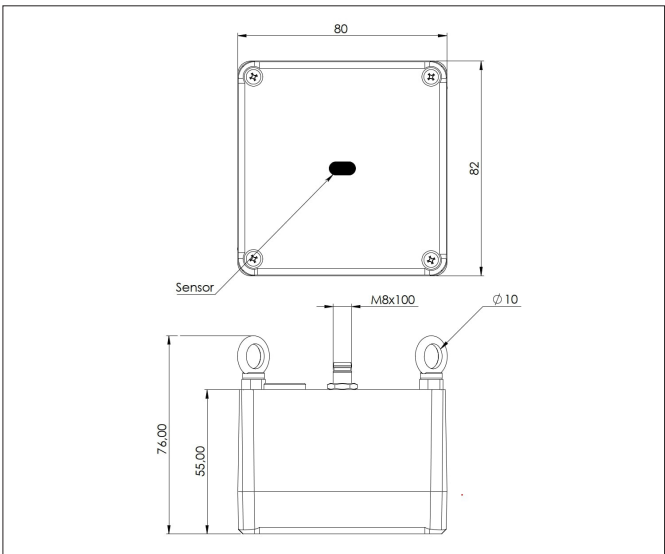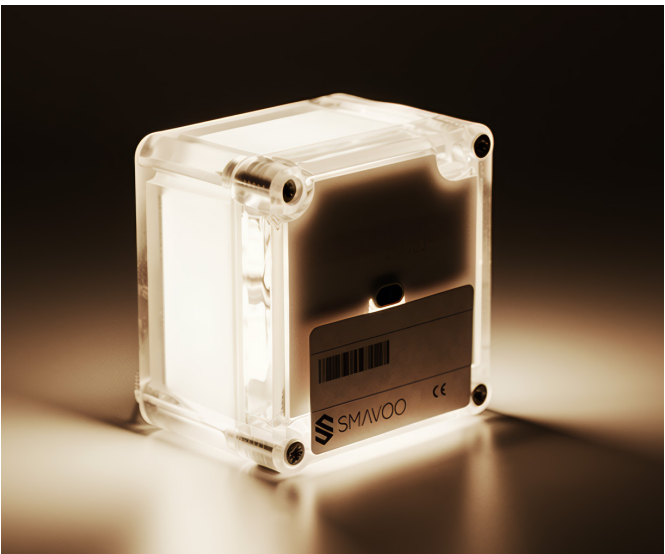
SMAVOO *Lightcube*

Description

The SMAVOO Lightcube provides real-time status updates via LED indicators, improving workflow visibility in warehouses and production environments. In addition to its signaling function, it also integrates distance measurement capabilities, similar to the Distance Sensor, for precise object tracking. Its dual functionality makes it a versatile solution for smart logistics and automation. Additionally, its hybrid communication options (WiFi & LoRaWAN) provide flexible connectivity for various industrial environments.

Key Features

01. Real-Time Status Visualization via Different LED Colors

02. Integrates Distance Measuring Up to 4 Meters

03. Robust & Secure Housing

04. Quick & Easy Installation

Enclosure		
	Dimensions	82 mm x 80 mm x 76 mm
	Material & Color	Polycarbonate, transparent
	Installation	Mounted hanging via integrated eyelets
Power Management	Power Supply	External 5 V to 40 V
Temperature Regulations	Operating Temperature	-10 °C to +40 °C
	Ingress Protection (IP)	IP40
Quality & Compliance	Certifications	CE
	Warranty	24 months
Device Functionality	Distance Measuring	Up to 4 meters
	External Connector	M8 for power supply, service connector

SMAVOO

Subject to errors and
technical changes

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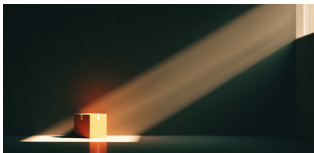www.smavoo.com

Use-Cases

Goods Receipt

At goods receipt, the SMAVOO Lightcube combines status lighting with distance sensing. When a pallet is placed in a defined spot, the sensor detects its presence and can trigger a check-in event in the WMS, while the light shows clear feedback such as received, hold, or action needed. This reduces manual scanning and phone calls, prevents unverified goods from moving on, and keeps dock teams aligned in real time, even during peak inbound waves, and shortens handover time.

Warehouse

In storage zones, Lightcubes act as visible location beacons with built-in distance sensing. Mounted on racks or lanes, they can indicate status with light signals and confirm whether a slot is occupied or free based on distance. If a location should be empty but an object is present—or stock is missing—the Lightcube can flag it instantly. That tight link between visual guidance and real-time sensing reduces misplacements and keeps physical storage aligned with the WMS.

Picking

During picking, Lightcubes enhance pick-by-light with an extra layer of confirmation. The light guides the picker to the correct bin, and the distance sensor can verify activity at that location, confirming the right pick face was handled. If the expected interaction doesn't happen, the signal can stay active to prompt a recheck, reducing wrong-bin picks. This speeds routes, simplifies training, and improves accuracy without paper lists or constant handheld lookups.

Transport

In transport and staging areas, Lightcubes work like an intelligent traffic signal with sensing. They can show clear states—ready, waiting, in progress—while the distance sensor confirms whether a pallet is present at a handoff point. If a load is still there past a deadline, the Lightcube can highlight the exception so it doesn't get forgotten. This improves handovers between forklifts, AGVs, and dock teams, reducing idle time and keeping flows synchronized all shift long.

Production

On the production line, Lightcubes show station status and confirm material presence. Lights indicate ready, waiting, or needs support, while the distance sensor verifies a bin, kit trolley, or load carrier is in place. When a container is removed or missing, the system can trigger replenishment and switch the signal instantly. This cuts manual checks, speeds response, and helps maintain uptime on fast-moving lines. That keeps operators and logistics aligned in real time.

Frequently Asked Questions

Can the Lightcube be configured to different color patterns for various warehouse scenarios?

Absolutely! The Lightcube features 360° LED indicators that can be fully customized to represent different statuses in your workflow. Whether you need to indicate ready-to-pick items, signal production readiness, or highlight inventory anomalies, the colors can be configured to match your specific process needs.

What makes the Lightcube's installation process "quick and easy" as mentioned?

Our Lightcube comes with versatile mounting options, including standard hanging installations and custom brackets upon request. With dimensions of only 78 × 80 × 55 mm and weighing just 200g, it can be easily positioned above containers or integrated into existing infrastructure without significant modifications.

How does the dual communication technology (WiFi & LoRaWAN) benefit my operation?

This hybrid approach gives you the best of both worlds: WiFi provides high-speed connectivity in areas with good network coverage, while LoRaWAN offers long-range communication with minimal power consumption in remote locations. This flexibility ensures reliable connectivity regardless of your facility's infrastructure.

Can the Lightcube be updated remotely, or does it require on-site maintenance?

We've designed the Lightcube with operational efficiency in mind. Firmware updates can be delivered over-the-air, allowing for remote configuration changes and software upgrades without disrupting operations. For situations requiring physical access, our service team can provide on-site support to minimize any potential downtime.

How does the Lightcube contribute to a more sustainable operation?

By automating status monitoring and distance measurement, the Lightcube reduces the need for manual checks and paper-based tracking. Its energy-efficient design, combined with precise object detection, optimizes resource allocation and minimizes waste in your processes, contributing to both operational efficiency and sustainability goals.

What security measures are in place to protect data transmitted by the Lightcube?

The Lightcube implements enterprise-grade security protocols, including WPA2 Enterprise, X.509 certificates with 4096-bit encryption, and Advanced Encryption Standard (AES). These security features ensure that all status updates and measurement data are transmitted securely, protecting your operational information from unauthorized access.

SMAVOO

Irrtümer und technische
Änderungen vorbehalten

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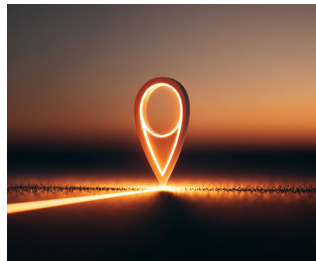E-Mail: info@smavoo.com
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ONE.CORE *Function*

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.
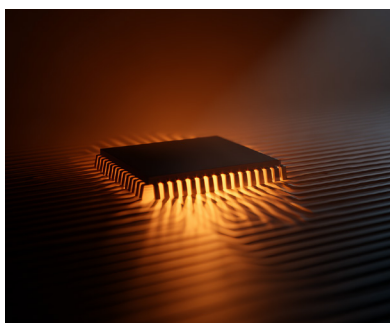
ONE.CORE *Key Features*

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

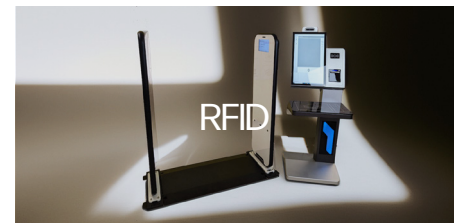| Core.BLE (optional Core.PDI)	Compliant with Bluetooth v4.2 BR/EDR and Bluetooth LE specifications
	NZIF receiver with −94 dBm Bluetooth LE sensitivity
	Adaptive Frequency Hopping (AFH)
	Bluetooth 4.2 BR/EDR and Bluetooth LE dual mode controller
	Multi-connections in Classic Bluetooth and Bluetooth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

SMAVOO *Solutions*

Hybrid Tracking

Hybrid indoor and outdoor tracking means none of your assets go AWOL on our watch. Our smart trackers give you a real-tme overview over your assets, and seamlessly move from outdoor to indoor. Our RFID solutions make sure you always know what's there - even with tricky interferences or metal parts.
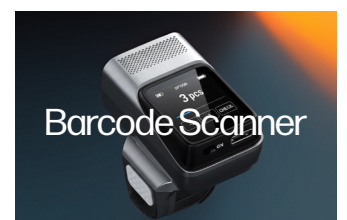

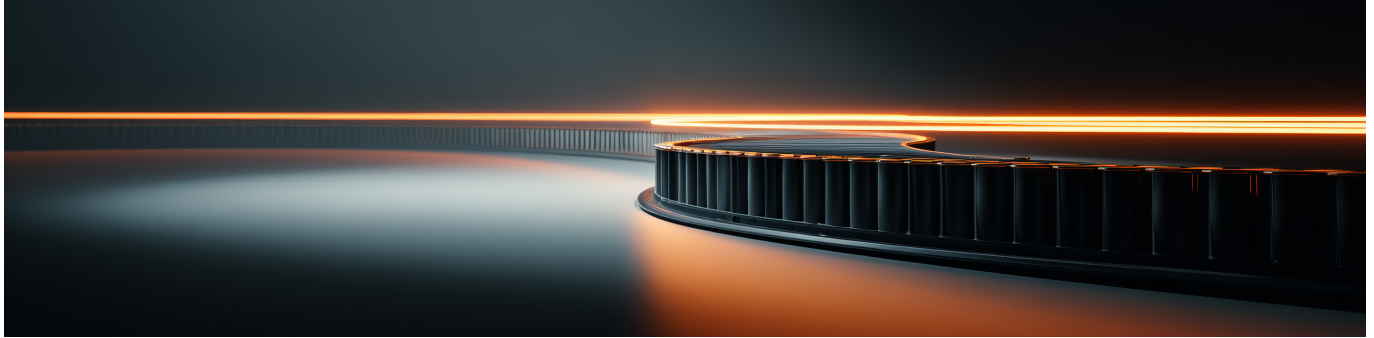GPS Tracker

Indoor Tracker

RFID

Smart Picking

Smart picking guides your workers from A to B - and our solutions are there to make sure every pick is the right one. From saving paper by replacing picklists with our EPD Tablets, handsfree Barcode-Scanners or our range of smar labels for KLTs and GLTs - we're always there to make sure the process flows just as intended.

Indoor Tracker

7.5 Double Label

Tablet 11.6

Barcode Scanner

Subject to errors and
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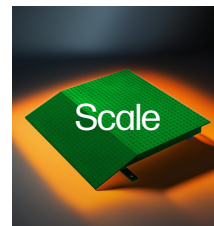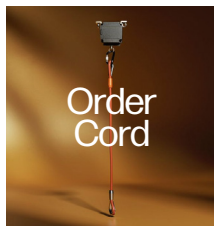E-Mail: info@smavoo.com
www.smavoo.com

Smart Reordering & eKanban

With our range of automatic and semi-automatic line feeding solutions, we make sure your line never stops. From Distance Sensors to Switches and Scales that detect when material levels are below a certain threshold to Order Cords and Reorder-Buttons: We make sure everything arrives on time, every time.
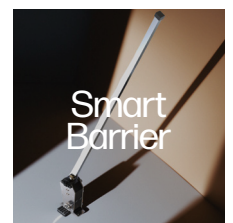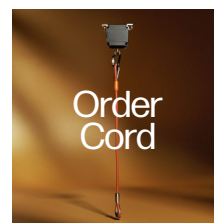

Indoor Tracker

Order Cord

Switch

Trolley

Scale

Distance

AGV / AMR Sensors

Our range of AGV/AMR sensors make sure your indoor transport is always perfectly coordinated and safe. With light-guided systems, AGV Buzzers and Smart Barriers, your existing fleet always finds its way through your warehouse - and if you're still looking for an AGV fleet, we've got you covered with our models as well.
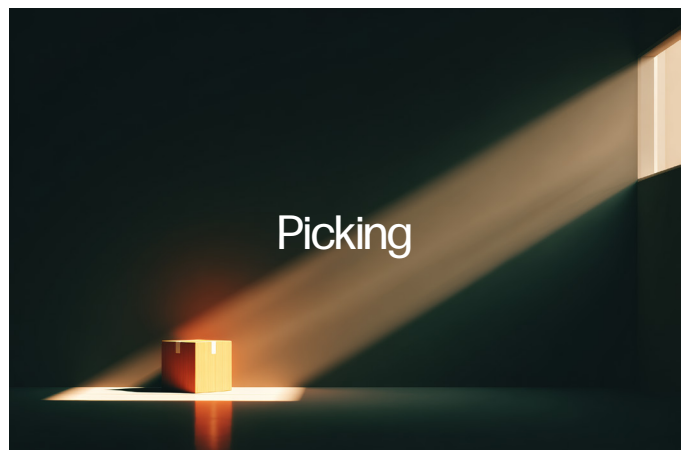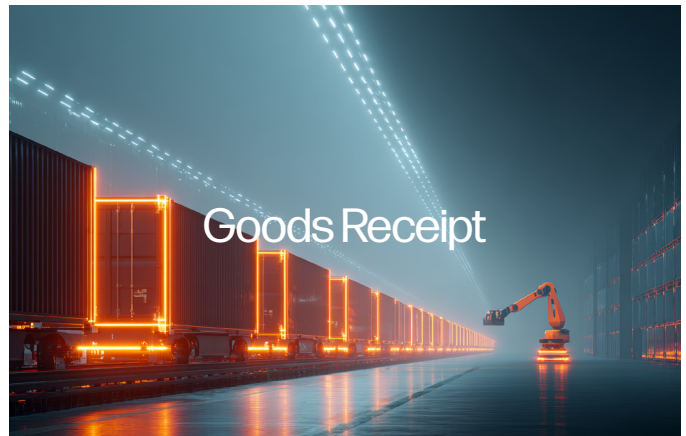

Lightcube

Lighttube

Distance

AGV / AMR Button

Order Cord

Smart Barrier

About SMAVOO

At SMAVOO, we believe in all-in-one-solutions: Hardware, Software & Service. We specialize in Industrial IoT (IIoT) solutions for production and logistics. Our expertise spans RFID technology, sensor networks, and software development with the goal of creating modular systems that make operations efficient, transparent, and error-free. Our customized solutions help companies digitalize their processes and make smarter decisions through real-time tracking across all modern workflows.

Material Flow

Inbound

Goods Receipt

Warehouse

Picking

Transport

Production

We're not here to bulldoze your workflow: Keep what works, ditch what doesn't. We plug in, make it smarter, and let you scale or pivot without rewriting your playbook. And because we're logistics people too, we know the pain of endless integration projects. We've been there, done that, and built something better: Fast rollouts, real support, and partnerships that don't vanish after go-live. Our track record? Industry leaders trust us to keep them ahead - because we deliver the goods, not just the sales pitch.

Smart, Seamless and Scalable. Or *Simply SMAVOO.*

SMAVOO

Contact Us

Excited about the future? So are we, and we look forward to optimizing your processes together. Whether you're interested in a demo setup or just a casual introduction, you can reach us here.

General Enquiries

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