Designed for AGVs. Durable Enough for Anywhere

SMAVOO AGV/AMR Button









Description

The SMAVOO AGV / AMR Button is an advanced smart labeling solution featuring an industrial-grade LED button that can be configured in various colors (RGB LED). The EPD visualization dynamically changes, with a refresh time under one second. This ruggedized device is optimized for AGV/AMR

integration but can also be utilized in standard industrial applications, such as material reordering. It features an ultra-low power chip, extending its battery life up to five years. With WiFi & LoRaWAN hybrid communication, it provides flexible connectivity for various automation and logistics applications.

Key Features

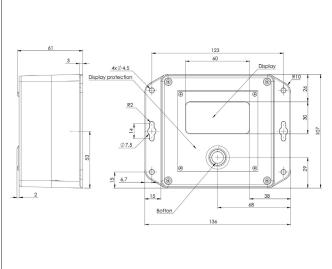
O1. Supports AGV, AMR, and Material Reordering

Customizable Display Design,
Fast Refresh Under One Second

2. Larger, Rugged Casing Built for Industrial Environments

D4. Built-In One.Core Connector for New Features





Enclosure	Dimensions	136 mm x 107 mm x 61 mm
	Material & Color	ABS, light grey
	Installation	Mounting via housing flanges, optional magnetic mount
Power Management	PowerSupply	2x ER34615 lithium batteries
	Lifetime	Up to 5 years
Temperature Regulations	Operating Temperature	0°C to +40°C
	Ingress Protection (IP)	IP40
Quality & Compliance	Certifications	CE
	Warranty	24 months
Device Functionality	Display	Black and white e-paper display, full refresh time under one second
	Button	Button with RGB LED
	External Connector	Service interface



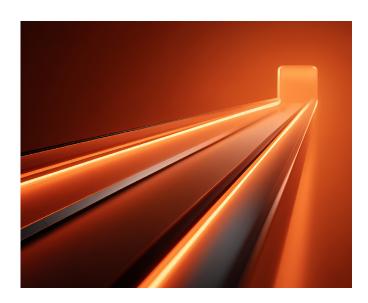
Use-Cases

Transport



The SMAVOO AGV/AMR Button is built to interface directly with automated vehicles and robots. In warehouses using AGVs or AMRs, it bridges people and machines at the point of work. After loading an AGV, an operator presses the large, glove-friendly button to hand over the task - depart now" - without walking to a terminal. The device gives instant LED feedback and refreshes its 2.9" e-paper display to show destination, job code or status, so everyone nearby understands the vehicle's mission. When an AGV arrives with parts, a worker can pressonce to confirm receipt, freeing the robot to continue. Mounted on carts, stations or pallets, it standardizes this human-robot handshake in busy zones. This removes timing guesswork, cuts robot dwell time, and keeps transport flowing. The button can also act as an emergency stop or reroute trigger, sending an immediate command to the fleet system. With robust housing, reliable connectivity and a long-life battery, it's a one-time install that improves safety, utilization and throughput across the fleet, every shift.

Production



In production areas where AMRs or tuggers handle line replenishment, the SMAVOO AGV/AMR Button becomes part of the workflow. When an AMR delivers a pallet or kit, the operator presses the button to confirm delivery; the task closes in the fleet software and the robot is released for the next job. Another press can request removal of an empty pallet or call a new full one matching the real pace of production without opening a screen. LED signals show clear states like "robot coming" or "waiting", acting as a simple traffic light at the station. Its e-paper label can display station ID, job code or priority, so the right action is obvious at a glance for everyone on the floor. Built for harsh environments, the impact-resistant design stays reliable amid dust, vibration and gloves-on operation. While optimized for AGV/AMR interaction, it can also serve as a rugged reorder/confirmation button for materials and process steps. The result is interactive automation: staff can adjust flows fast, reduce downtime, and keep replenishment flexible instead of rigid.

Frequently Asked Questions

How durable is this button in a busy warehouse environment with frequent impacts?

Unlike standard buttons, the AGV/AMR Button features a ruggedized industrial casing designed specifically for high-traffic environments with potential impacts. It withstands accidental forklift bumps, vibrations from heavy machinery, and exposure to dust and moderate moisture. The larger form factor and reinforced housing protect the internal components even in demanding industrial applications.

What happens if our WiFi infrastructure fails? Will the buttons stop working?

The hybrid communication system can automatically switch to LoRaWAN if WiFi connectivity is interrupted. This failover happens seamlessly without operator intervention, ensuring continuous operation even during network outages. Once WiFi is restored, the system switches back automatically, maintaining reliable communication throughout infrastructure fluctuations.

Can operators receive confirmation that their button press was successfully registered?

Yes! The button provides three levels of confirmation: immediate tactile feedback when pressed, visual confirmation via the color-changing LED, and display confirmation on the integrated e-paper screen. The display can show status messages like "Request Sent" or "AGV Dispatched," ensuring operators know their action was received by the system.

How difficult is it to relocate buttons as our workflow changes?

The flexible mounting system allows for quick relocation without extensive infrastructure changes. Depending on your mounting choice, buttons can be moved in minutes, with wireless connectivity eliminating the need for wiring modifications.







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

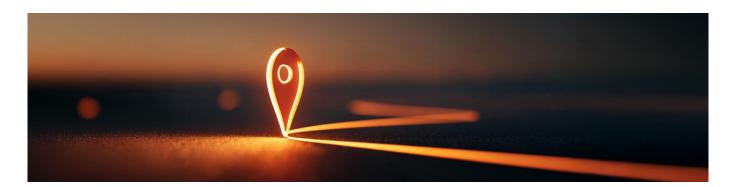
ONE.CORE Multiband

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	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, LoRaTI	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 s	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

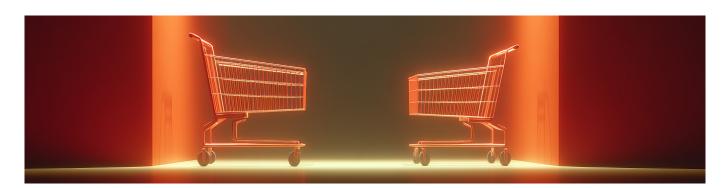
seamlessly move from outdoor to indoor. Our RFID solutions make sure you always know what's there - even with tricky interferences or metal parts.







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.









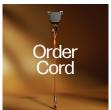


Smart Reordering & eKanban



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.











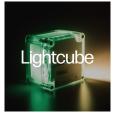


AGV/AMR Sensors



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.











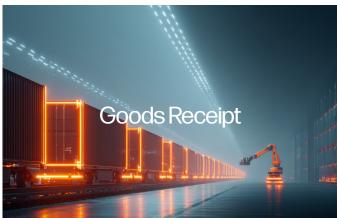


At SMAVOO, we believe in all-in-one-solutions: Hardware, Software & Service. We specialize in Industrial IoT (IIoT) solutions for production and logistics. Our expertise spans RFID technology, sensor networks, and software development with the goal

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













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. SM/VOO

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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