

Build the Bridge Between Devices and *Decisions*

# SMAVOO

## *LoRaWAN Gateway*





### *Description*

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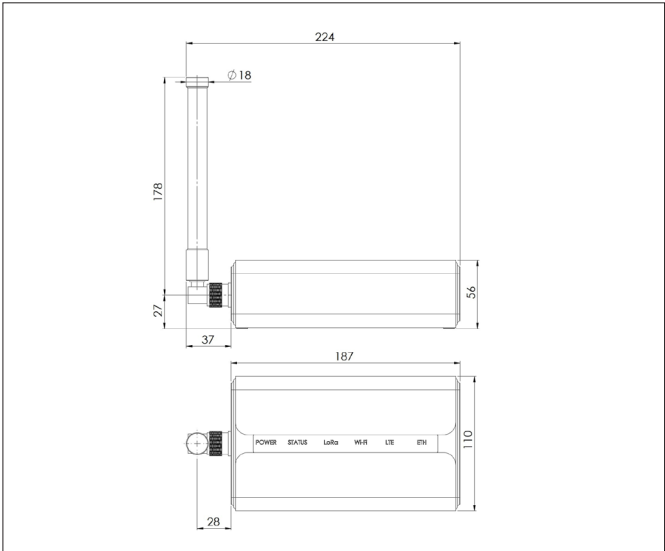
The SMAVOO LoRaWAN Gateway is a Power over Ethernet (PoE) device designed for seamless LoRaWAN network integration. It enables reliable, long-range data transmission for IoT applications such as sensor-based automation, asset tracking, and environmental monitoring. Compatible with various international

frequency bands, it ensures global adaptability for industrial and logistics environments. Paired with a network server, it facilitates scalable, efficient, and secure IoT communication. Additionally, its hybrid communication options (WiFi & LoRaWAN) provide flexible connectivity for various industrial environments.

### *Key Features*

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|-----|--|-----|------------------------------------|
| 01. | Long-Range Coverage.<br>Low-Power Communication. | 03. | Plug in Once.<br>Scale Infinitely. |
| 02. | One Gateway.<br>Hundreds of Devices.             | 04. | Global-Ready.<br>Secure by Design. |
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Enclosure	Dimensions	224 mm x 110 mm x 56 mm
	Material & Color	PC, ABS, white and black
	Installation	Desktop, wall, and mast mounting
Power Management	Power Supply	9 - 24 VDC (DC jack) or 802.3af PoE
	Power Consumption	Typical 29 W, max 42 W
Temperature Regulations	Operating Temperature	-40 °C to +70 °C (reduced cellular performance above +60 °C)
	Ingress Protection (IP)	IP65
Quality & Compliance	Certifications	CE, FCC, IC, Telec, JATE, RCM
	Warranty	24 months
Device Functionality	Antenna	2x Internal Antennas + 1x 50 Ω N-Female External Connector
	Button	1x Reset button
	External Connector	1x RJ45 WAN (PoE PD supported), 1x USB-C (console)

## *Use-Cases*

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### Inbound & Yard Management



The Smavoo LoRaWAN Gateway provides the long-range wireless backbone that Smavoo sensors, trackers and buttons use to communicate. At inbound, this means devices stay connected from yard to dock and data arrives in real time. As a truck approaches, connected assets can report status the moment they enter coverage, and newly received pallets can come online immediately. LoRaWAN's range and penetration suit large yards and warehouses where Wi-Fi can be patchy, enabling wide-area coverage with minimal infrastructure. The gateway supports high device counts, so hundreds of signals can be handled without congestion. With encrypted communication, it keeps operational data protected while ensuring inbound automation stays online end-to-end.

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### Warehouse Floor Operations



Inside the warehouse, the Smavoo LoRaWAN Gateway is the central hub that receives messages from switches, buttons, lights, scales and trackers and forwards them to your warehouse systems. Because LoRaWAN is built for low power, devices can run for years on batteries while still sending reliable updates. The gateway's long range helps reach deep storage areas, remote corners and zones behind thick walls, reducing the need for cabling or dense Wi-Fi access points. It also scales with your rollout: you can add more sensors and tags as processes grow, and extend coverage by adding gateways. Since the network is separate from Wi-Fi, it won't compete with handhelds and PCs, keeping operations responsive. So button presses arrive reliably.

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### Picking & Production Network



In high-activity zones like picking and production, dozens of devices may send requests and status updates at the same time. The Smavoo LoRaWAN Gateway makes sure those signals get through reliably so automation stays coordinated. When operators trigger calls or confirmations, the gateway receives and forwards each event without delays. This helps avoid missed low-stock alerts, unregistered button presses, or late status changes that erode trust. LoRaWAN networks are easy to scale: as your facility grows, you expand coverage and capacity by adding gateways. The result is industrial-grade connectivity that keeps workflows moving smoothly. A few gateways can cover large areas and keep IoT traffic off your Wi-Fi for handhelds and PCs.

## *Frequently Asked Questions*

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How many devices can a single LoRaWAN Gateway support simultaneously?

Our gateways are designed to handle thousands of devices efficiently. The 16-channel version can manage up to several thousand sensor messages simultaneously, with each channel supporting hundreds of devices. The actual capacity depends on how frequently your devices transmit data, but for typical warehouse applications with sensors updating every few minutes, a single gateway easily covers facility-wide deployments.

What's the coverage range of the LoRaWAN Gateway, and how does it perform in industrial environments?

LoRaWAN technology can reach up to 10km in open areas, while indoor industrial environments typically achieve 500m to 2km coverage per gateway. The signal penetrates walls, metal structures, and shelving much better than WiFi, making it ideal for dense warehouse environments. The actual range depends on building layout, but most facilities can achieve full coverage with one to three strategically placed gateways.

How does LoRaWAN differ from WiFi for industrial IoT applications?

LoRaWAN is specifically designed for IoT—it uses less power, covers longer distances, and handles more devices per antenna than WiFi. Your sensors and trackers can run for years on battery power with LoRaWAN, versus weeks or months with WiFi. Additionally, LoRaWAN doesn't interfere with your existing WiFi network, keeping your laptops and scanners running at full speed while supporting hundreds of sensors.

How secure is the data transmission through the LoRaWAN network?

Security is built into every layer of LoRaWAN communication. All data uses AES-128 encryption, with unique keys for each device. The gateway provides additional security features including VPN support, DMZ configuration, and secure management protocols. Your operational data remains protected from interception or tampering throughout transmission.

How does maintenance work, and can we perform over-the-air updates?

Maintenance is minimal thanks to the industrial-grade design. Firmware updates can be performed remotely over the network, eliminating the need for site visits. The gateway includes health monitoring and diagnostic tools accessible through web interface or CLI, allowing proactive maintenance scheduling. Most updates take just minutes and can be automated.

# SMAVOO *Solutions*

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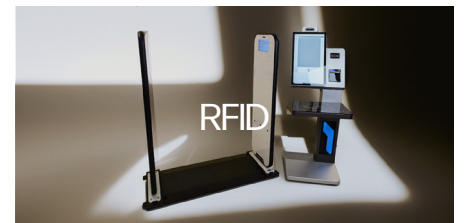
## *Hybrid Tracking*

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Hybrid indoor and outdoor tracking means none of your assets go AWOL on our watch. Our smart trackers give you a real-time 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.



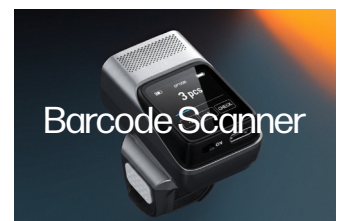
## *Smart Picking*

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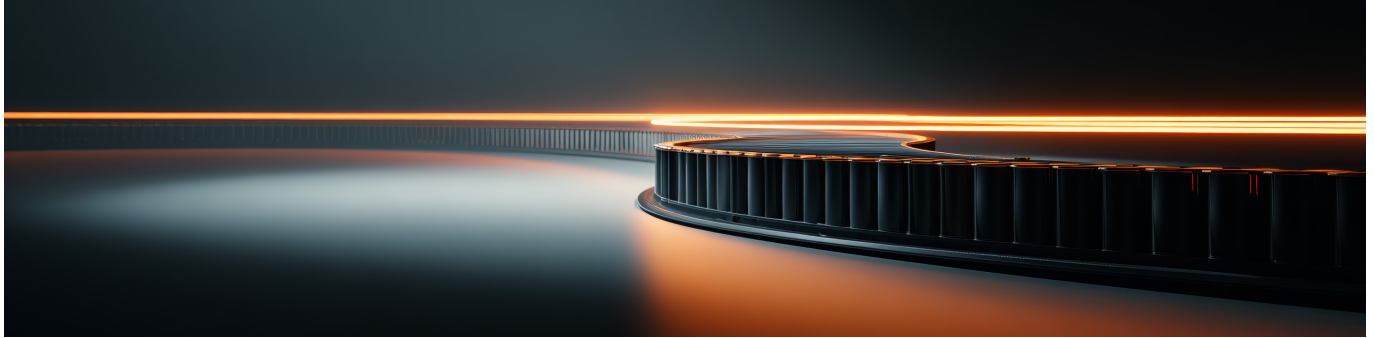


Smart picking guides your workers from A to B - and our solutions are there to make sure every pick is the right one. From saving paper by replacing picklists with

our EPD Tablets, handsfree Barcode-Scanners or our range of smart labels for KLTs and GLTs - we're always there to make sure the process flows just as intended.

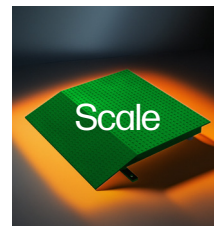
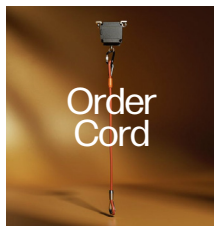


## Smart Reordering & eKanban



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.

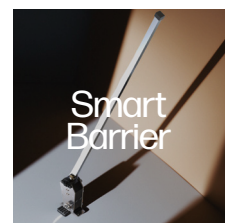
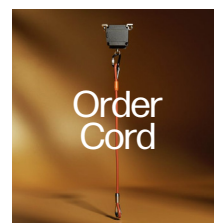


## AGV/AMR Sensors



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.



## About SMAVOO

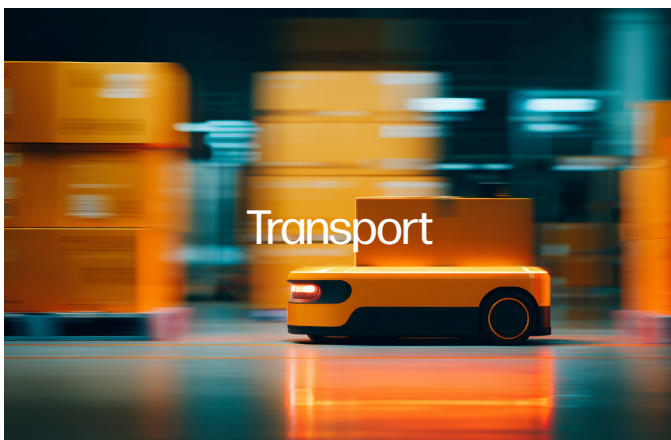
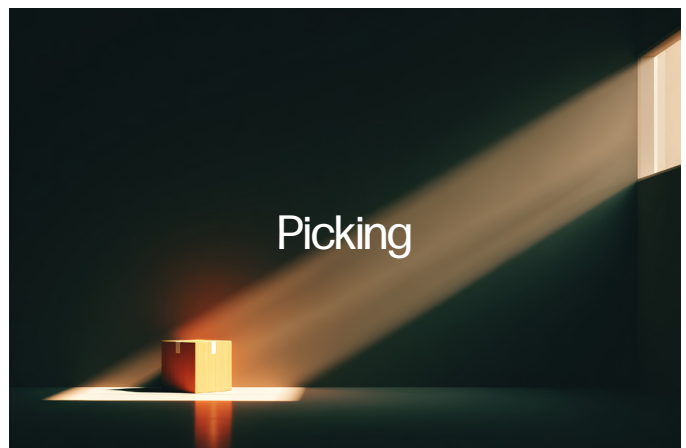
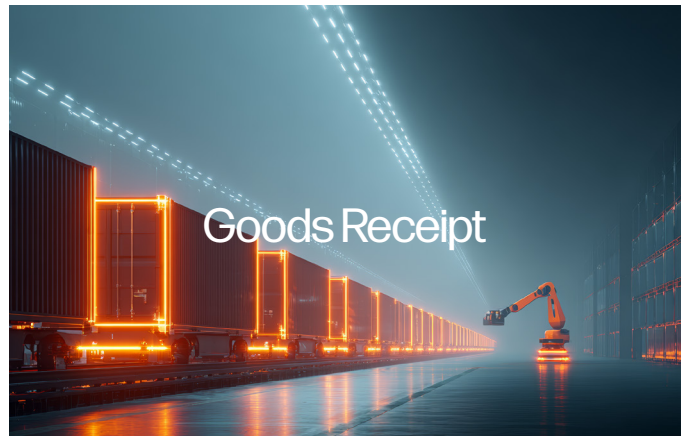
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At SMAVOO, we believe in all-in-one-solutions: Hardware, Software & Service. We specialize in Industrial IoT (IIoT) solutions for production and logistics. Our expertise spans RFID technology, sensor networks, and software development with the goal

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

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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 SMAVVO*.



## *Contact Us*

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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.

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*General Enquiries*

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