

RGo Robotics Revolutionizes Automation Deployment with AI-Powered Intelligent Mapping Solution

Breakthrough technology leverages NVIDIA Isaac Perceptor acceleration libraries to transform site commissioning from months to weeks; Building the first layer of a site Physical AI information platform, critical enabler for AI automation

CAMBRIDGE, Mass – March 5, 2025 - **RGo Robotics**, a leader in edge perception solutions for intelligent automation, today announced a groundbreaking next generation Physical AI based solution that addresses one of the most significant challenges of the mobile robot industry: the complexity and cost of site commissioning limiting adoption & scalability. By combining RGo's proven Perception Engine platform integrated with NVIDIA's cutting-edge AI capabilities, RGo is fundamentally changing the economics of mobile robot deployment, dramatically reducing time to value and increasing ROI for both end customers and robotics solution vendors.

The new intelligent mapping solution transforms site commissioning into an automatic process that can be completed in days rather than months. This breakthrough comes at a crucial time for the automation industry, where deployment speed and efficiency are becoming the bottleneck for success.

"Our Perception Engine has already helped customers expand their automation capabilities and solve complex deployment challenges," **said Amir Bousani, RGo Co-founder and CEO.** "Today's announcement represents a transformative leap forward for the mobile robot industry and intelligent AI automation. Our intelligent mapping technology doesn't just solve commissioning challenges—it establishes the first foundational layer of a site-wide Physical AI information platform. This layer will allow more intelligent operation and decisions powered by modern physical AI tools. I am incredibly proud of our team's achievements, and we remain committed to making intelligent automation powered by Physical AI a reality."

Revolutionary Automated Mapping Technology

RGo's Perception Engine combines layers of computer vision algorithms (including vSLAM), artificial intelligence, and sensor fusion to enable robots to understand and adapt to their environment in real-time. The platform has already proven successful in complex and dynamic environments, both indoor and outdoor.

While deployments of Autonomous Mobile Robots are scaling worldwide, the commissioning process has remained a bottleneck, often requiring months of manual work and specialized resources.

The new mapping solution automatically generates fully populated site maps, based on 3D & semantics, increasing accuracy and empowering self-service capabilities. These maps are immediately available without further processing and enable:

- Task and mission planning
- Automation workflow design
- Traffic management
- Analytics and insights visualization leveraging the Physical AI information they contain

Automating commissioning with machine intelligence

The new solution leverages the AI-powered intelligence of machines to automatically create the information they need to operate. The system collects data through RGo Perception Engine units mounted on mobile machines, either as embedded solutions or add-ons. Using NVIDIA CUDA-accelerated nvblox library (part of [NVIDIA Isaac Perceptor](#)) it performs 3D reconstruction before adding semantic information, leveraging general and specific object segmentation libraries, and tools.

The intelligent mapping solution:

- Generates synchronized localization information with 3D geometric and semantic data
- Automatically segment objects, junctions, aisles, and relevant signage
- Creates detailed maps that can be shared across all mobile machines at a site
- Forms the first layer of a site Physical AI information platform to enable AI-powered observations and actions

Business Impact


This advancement in mapping technology delivers multiple benefits:

- Reduces commissioning time from months to days
- Enables brownfield applications with zero downtime for deployment
- Enables data-driven insights for operational optimization
- Supports multiple applications for enhanced safety, efficiency, and productivity

For more information about RGo Robotics and the new 3D mapping solution, visit

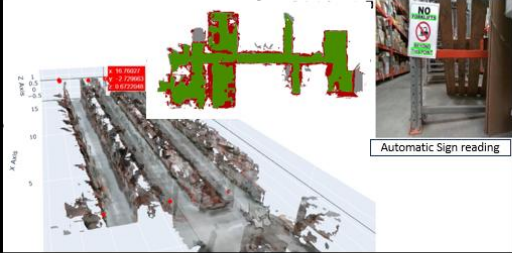
<https://www.rgorobotics.ai/intelligent-mapping>

From 2D Map



➔

To Intelligent Map



- 2D only
- Long manual process
- Requires on-site engineer
- Prone to errors

- ✓ Rich 3D + Semantic information
- ✓ Automatically generated
- ✓ Continuously updated
- ✓ No special skills required

About us –

RGo Robotics is revolutionizing the AI robotics and automation industry with its robust and reliable edge perception software platform enabling mobile machines to perceive, understand and interact with the world around them. Our platform delivers real-time localization and 3D semantic information, enabling autonomous navigation, digital presence of all moving machines, Intelligent site maps and provision of spatial information to a range of AI applications to improve productivity, efficiency and safety.

Deployed with leading industrial companies and gaining significant traction in the market, RGo's solution stands out for its ability to provide high performance, ready to scale edge perception solution that can be easily deployed and integrated with multiple applications.

RGo Robotics has offices in Cambridge, Massachusetts, and Caesarea, Israel, and is backed by a diversified set of leading investors and strategic partners.

<https://www.rgorobotics.ai/>