



Compact by design.
Strong in performance.

Our NXS 300.

Make the most of your potential.

The NXS 300 from AUMOVIO Robotic Solutions sets new standards in mobile robots for transporting small load carriers in terms of efficiency enhancement, cost optimization and streamlining intralogistics.



Safety

24/7 resilient and safe through 360° environment detection with obstacle recognition and option for autonomous bypassing.



Compatibility

Compatible with floor guiding rails and available as standard variant for small load carriers, extended variant for half pallets and top roller for conveyor handover.



Efficiency

Highest transport density due to stacked small load carrier transportation with an ultra-compact design and a maximum payload of 300 kg.



Integration

Maximum interoperability and full integrability in compliance with VDA 5050 through collaboration with established fleet management systems.



Handling

User-friendly HMI with ergonomic design for intuitive operation and maintenance.



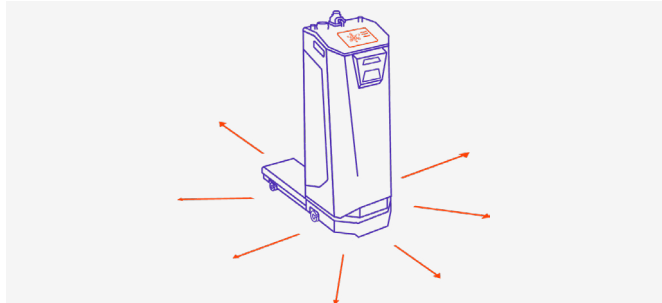
Omnidirectional movement

Maximum load handling precision with speeds of up to 2.0 m/s.



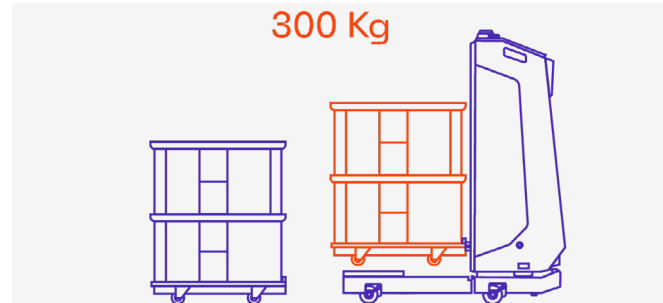
Landmark features

Use case specific robot configuration



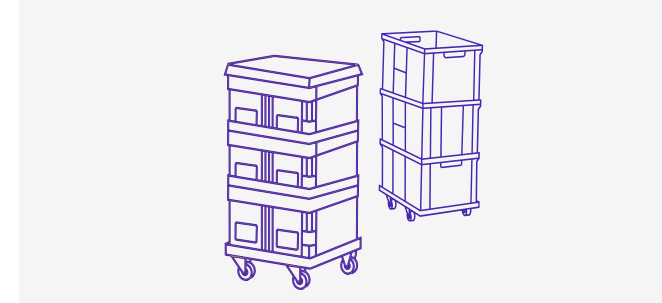
Omnidirectional

Full omnidirectional movement for narrow aisles transportation.



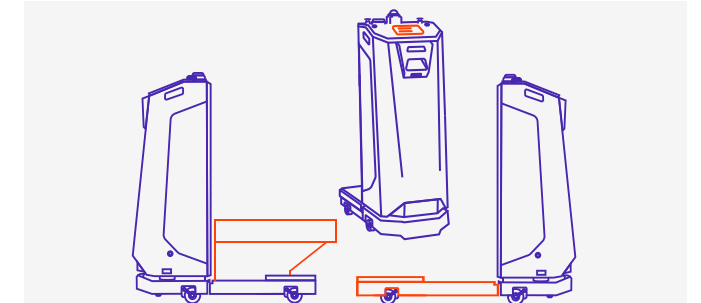
Maximum payload

Highest transportation efficiency with maximum payload of 300 kg.



Load carrier compatibility

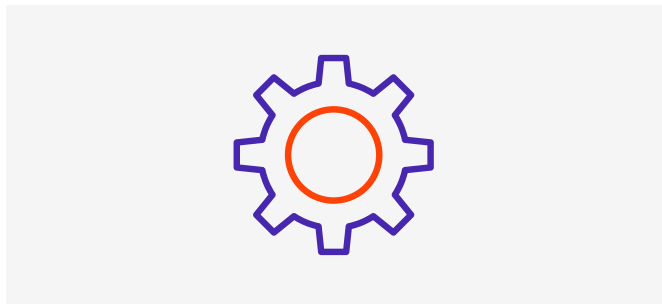
Handling of a wide range of load carriers (small load carrier and half pallet).



Product variants

Maximum customer value with use case specific product variants (base, extended, top-roller).

Holistic Integration and Collaboration



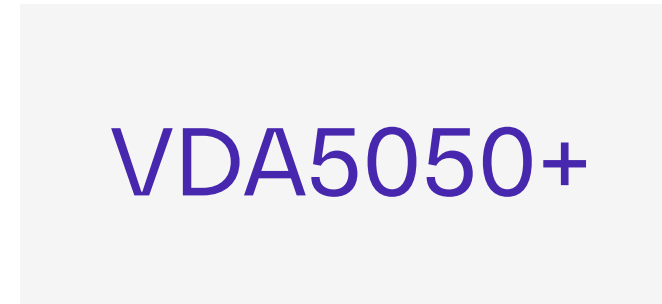
Scalable compute

On-board compute allows addition of custom features, if needed.



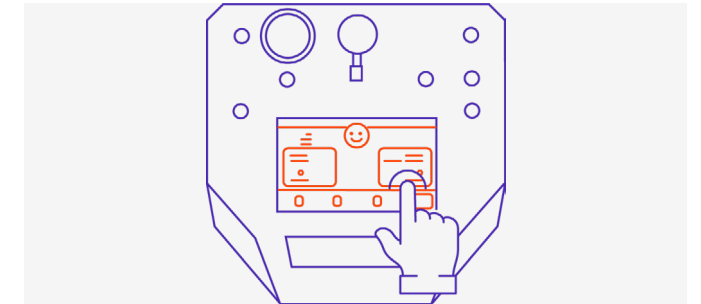
Fast remote support

Secure Socket Shell (SSH) access for remote support.



Robust VDA5050+

Deep integration with partners incl. automated verification & validation.

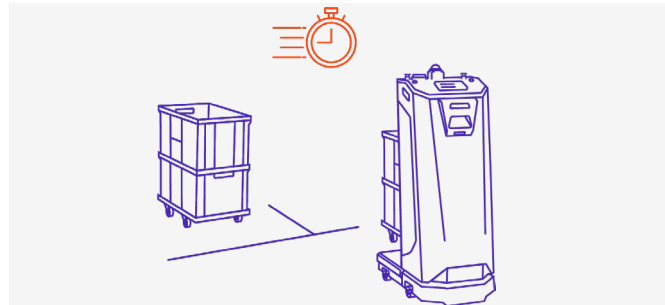


User-friendly human-machine interface

Responsive touch display and intuitive robot handling.

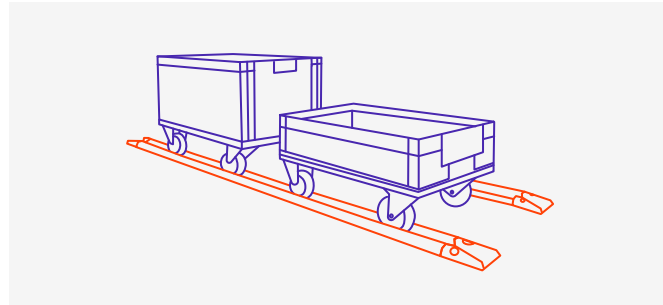
Landmark features

Reliable load handling



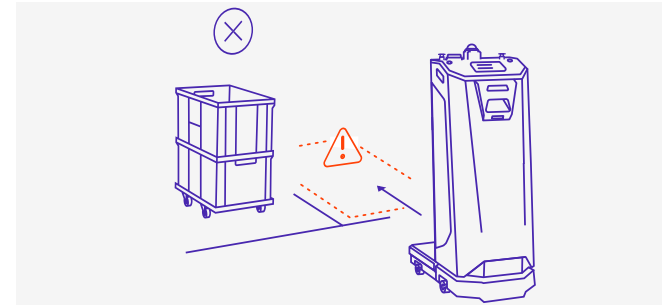
Robust docking

Tolerant docking with smart recovery even for last minute displacements.



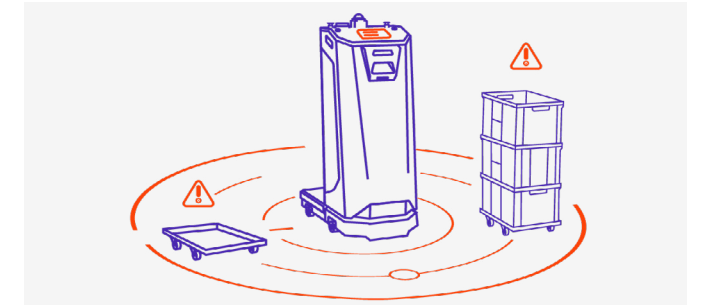
Supermarket rail systems

Compatible with supermarket rail systems w/o ground tape for precise load drop and pick-up.



Empty space drop

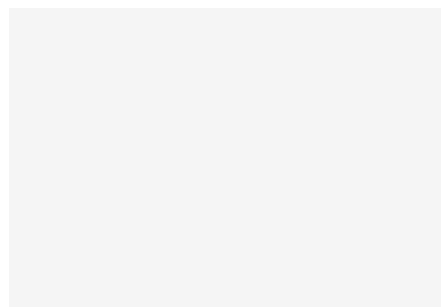
Automatically identify empty space next to a blocked POI, if desired.



Cart detection

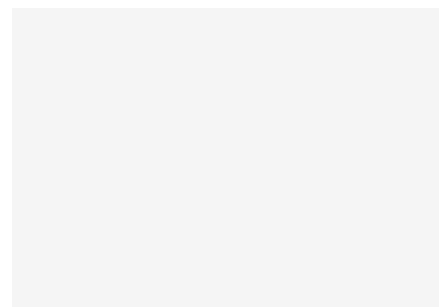
Robust detection & transport of AUMOVIO and customer carts.

Robust robot localization and navigation



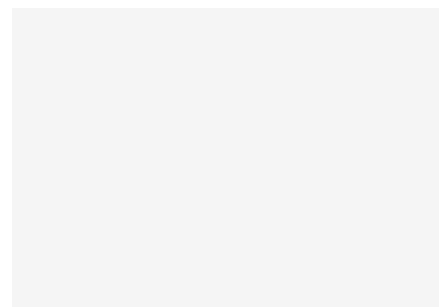
Smart localization

3D-laser scanner on top for robust and precise localization.



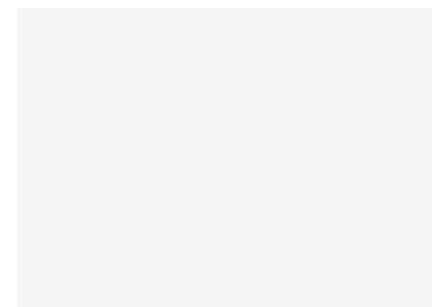
Seamless transition

Smooth and fast transition from global to local navigation.



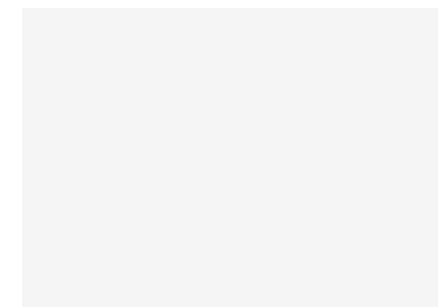
Obstacle avoidance

Navigation around obstacles on paths & detection of objects at height.



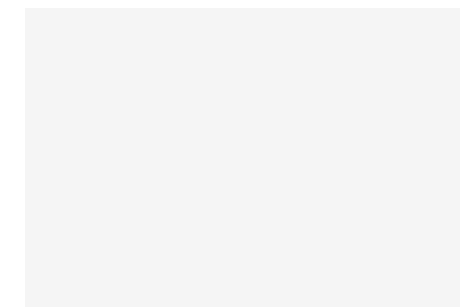
Continuous mapping

Fast partial map updates in few minutes, if and where needed.



Autonomous navigation

2 m/s top speed with fast docking & undocking.



Highest safety

2D-laser scanner and cameras for 360° perception.

Our top performers for your goods.

Wherever flexibility and performance meet – the NXS series delivers reliable transport for small load carriers and changing processes. Your strong partner for all your needs.

Base

For standard dollies
(600×400 mm)

- Handles up to 300 kg payload
- Ideal for material flow between assembly lines and storage areas
- Compact footprint for tight spaces and mixed traffic



Extended

For half-pallet loads
(800×600 mm)

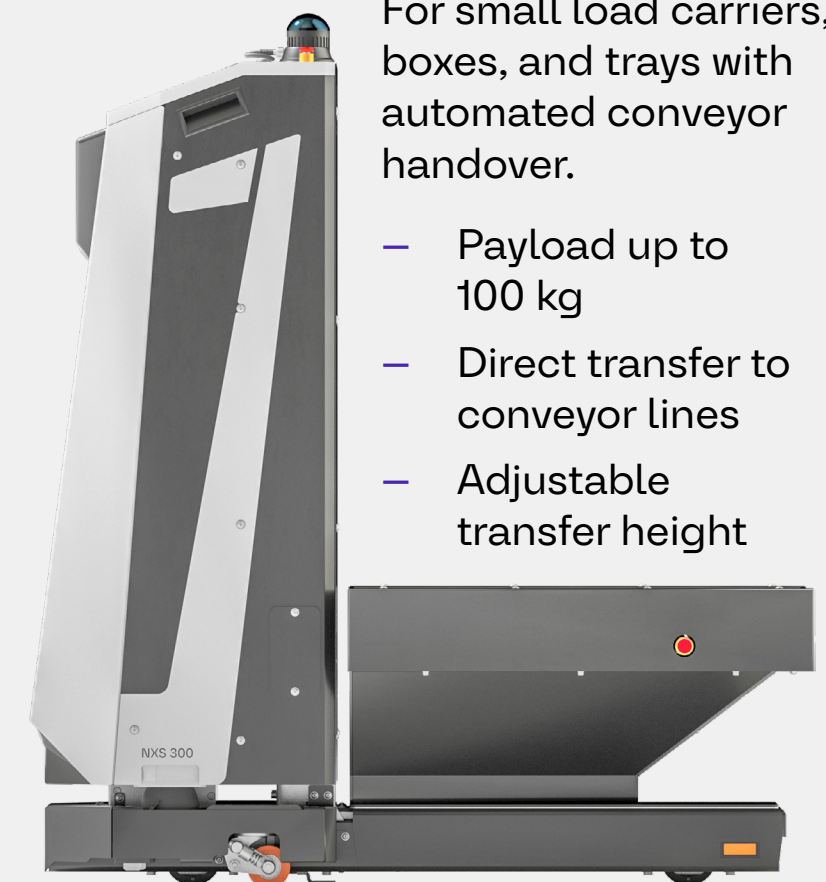
- 300 kg payload capacity
- Perfect for transporting heavier or bulkier components
- Supports flexible integration into existing conveyor and storage systems



Top Roller

For small load carriers, boxes, and trays with automated conveyor handover.

- Payload up to 100 kg
- Direct transfer to conveyor lines
- Adjustable transfer height



Take it to the next level on-site.

Control your entire AMR fleet with one intuitive system. From shopfloor robots to IT applications, everything works seamlessly together for maximum efficiency. Simple, scalable, and ready to optimize your operations.

The three layers of control

- 1 IT Layer**
Processing of orders and analytical insights to various applications and business processes.
- 2 Fleet Manager**
Cloud- and/or edge-based layer that connects and orchestrates AMR operations.
- 3 Shopfloor AMR Layer**
Multitude of AMR, AGV and other solutions serving a wide variety of tasks.



Support you can count on.

Our AMRs keep your processes running smoothly and reliably. And if there's ever a need, you can count on us: we're available 24/7 to provide assistance and support.



We install the AMR and get it up and running, then teach you to confidently manage the Fleet Master Control system on your own.



We work with you to identify the areas and processes that can benefit from automation with our AMRs.



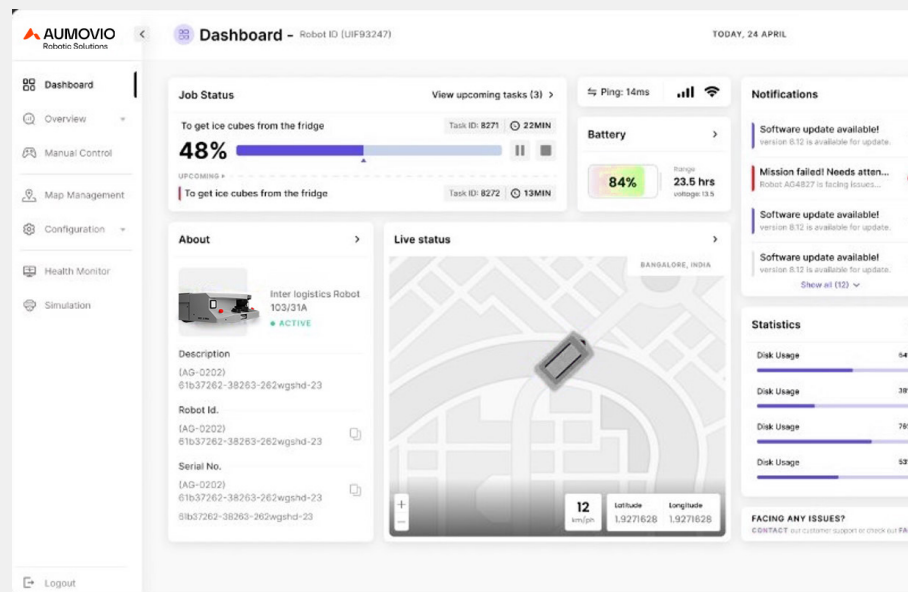
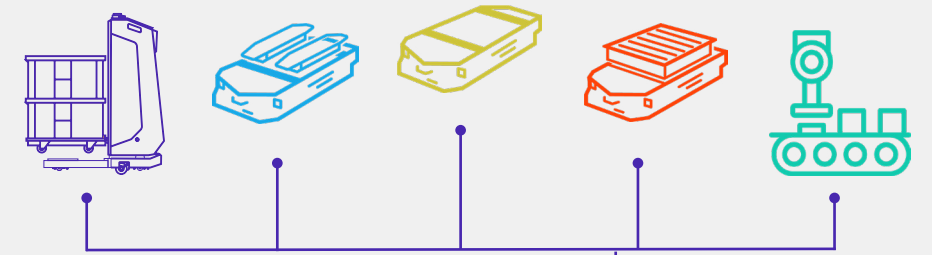
We optimize your AMR's performance whenever there's a need. Processes, goods, and materials can change.



Full transparency and always in control.

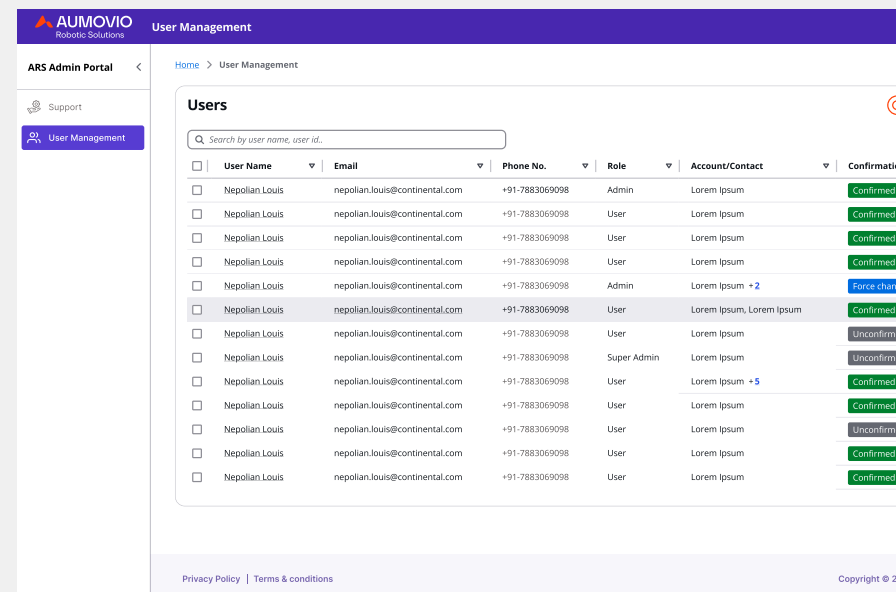
AUMOVIO AMR Software Ecosystem.

Our AMRs operate through three key platforms: AMR-I for robot control, AAP for admin management and FMC for fleet operations with strong partners.



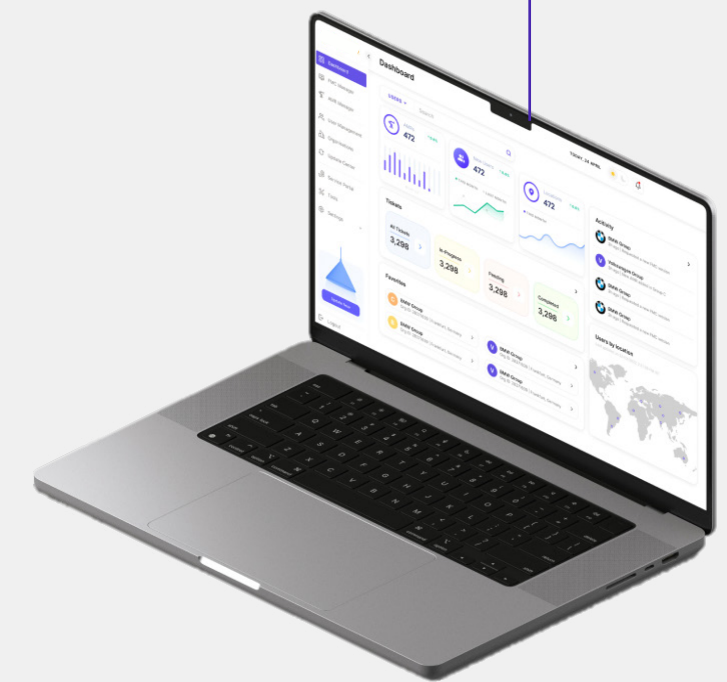
AMR-I - AMR Interface

Your interface for intuitive robot control and monitoring.



AAP - AMR Admin Portal

Your platform for managing all AUMOVIO Robotic Solutions AMRs and services.



FMC - Fleet Master Control

Your reliable fleet operation system according to VDA 5050 standards with strong partners.

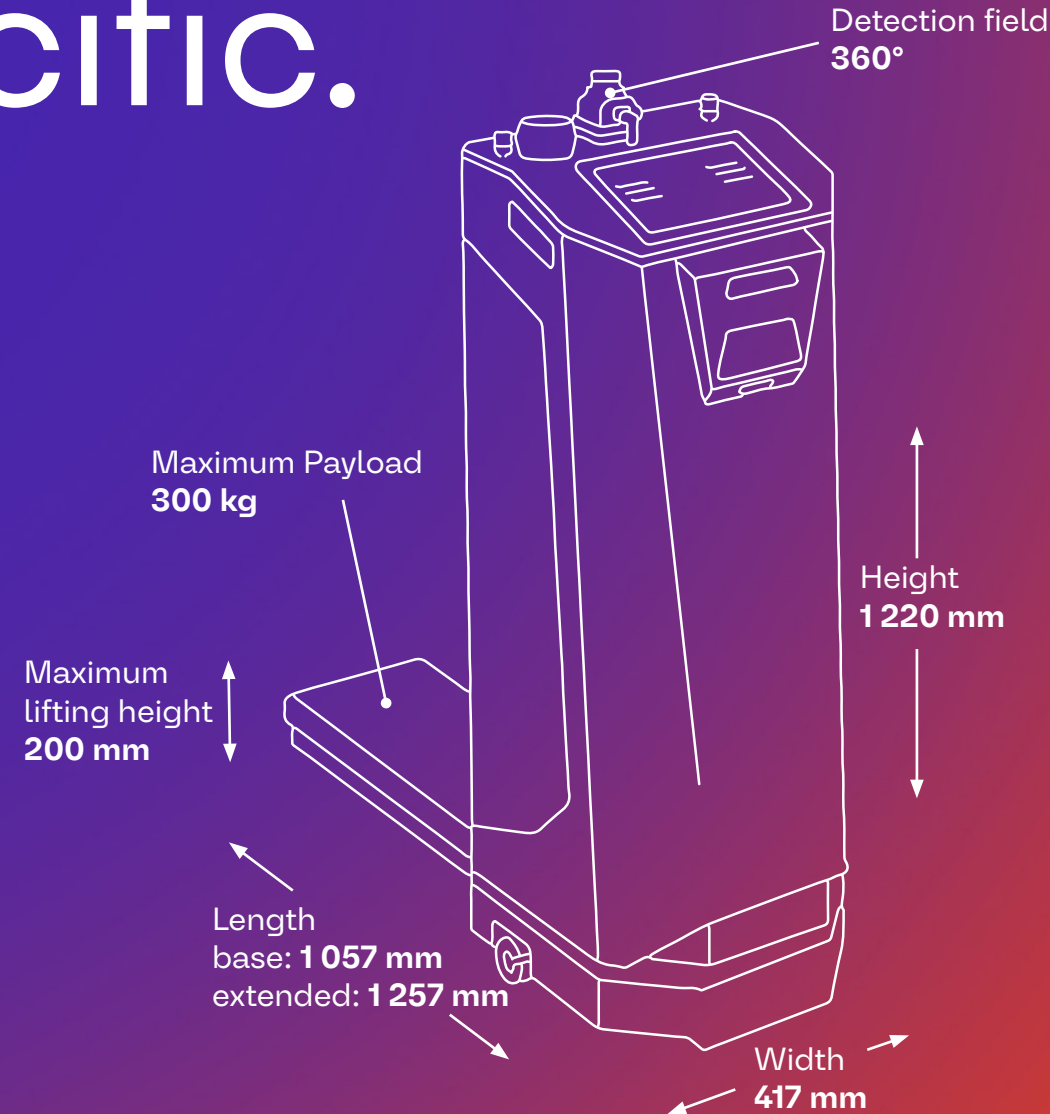
KINEXON **NAISE** SYNAOS

Let's get more specific.

Base and extended version

Dimensions	Base Version	
	Length x width x height	1 057 mm x 417 mm x 1 220 mm
	Extended version	
	Length x width x height	1 257 mm x 417 mm x 1 220 mm
	Weight	165 kg
Performance Characteristics	Maximum payload	300 kg
	Maximum lifting hight	200 mm
	Top speed	Up to 2.0 m/s
	Rotation diameter (incl. min. safety fields)	Base Version: 1 650 mm Extended Version: 1 850 mm
	Drive system	2x omnidirectional drives
	Navigation	SLAM (optional: QR code, line navigation)
	Positioning accuracy	Fine positioning: ± 20 mm
Power Supply	Battery type	Li-Ion / 48 V / 2,5 kWh
	Charging current	30 A
	Charging strategy	Opportunity Charging
	Charging time	1:20 h
Environment	Ambient temperature	5°C – 40°C
	Humidity	10 % – 90 % @ 39°C, non-condensing
Connections	Wi-Fi link	2.4 GHz and 5 GHz supported
	Integration	VDA 5050-compatible
	Manual control	USB controller, control via notebook / mobile phone

Safety	Sensors and safety functions	2x Laser Scanner, 3x 3D-Camera, 1x 3D-Laser Scanner, Laser Scanner, 3D-Cameras, Emergency Stop Button, Light Spot
	Detection range	360°
	Safety standards for Industrial Vehicles	ISO 3691-4:2023, UL 3100:2021, Machine Regulation (EU) 2023/1230, Radio Equipment Directive 2014/53/ EU, ISO 13849-1:2023, EN ISO 13849-2:2012, EN 1175:2020, EN 12895:2015+A1:2019, CE, UL 3100:2021, ANSI/RIA R15.08-1-2020,ANSI/ITSDF B56.5-2019
	IP-Code	IP20



Let's get things done Automatically.

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