



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.



Efficiency

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



Handling

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



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.



Integration

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



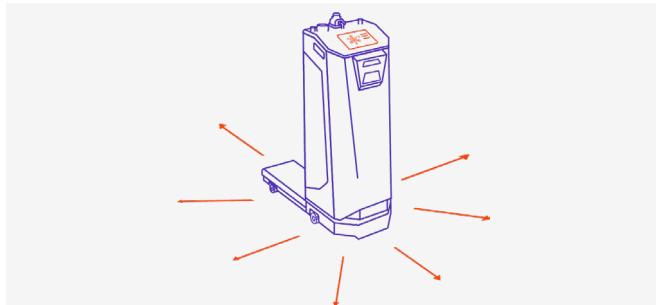
Omnidirectional movement

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.



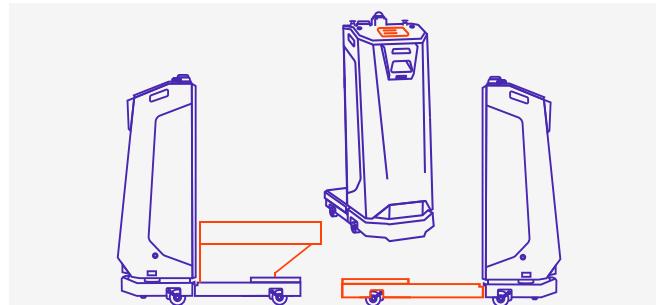
Maximum payload

Highest transportation efficiency with maximum payload of 300 kg.



Load carrier compatibility

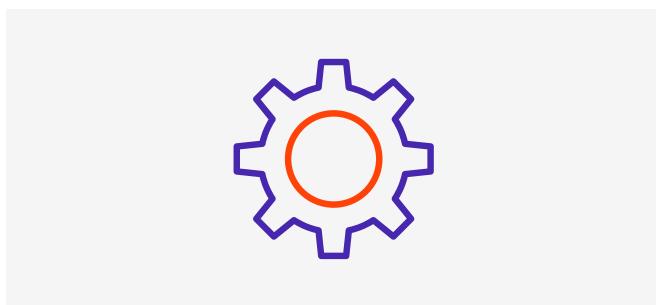
Handling of a wide range of load carriers (small load carrier and half pallet).



Product variants

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

Holistic Integration and Collaboration



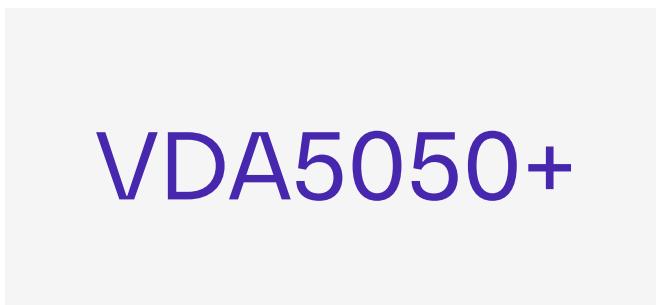
Scalable compute

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



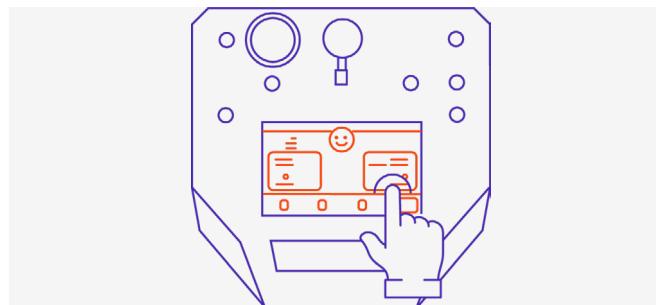
Fast remote support

Secure Socket Shell (SSH) access for remote support.



Robust VDA5050+

Deep integration with partners incl. automated verification & validation.

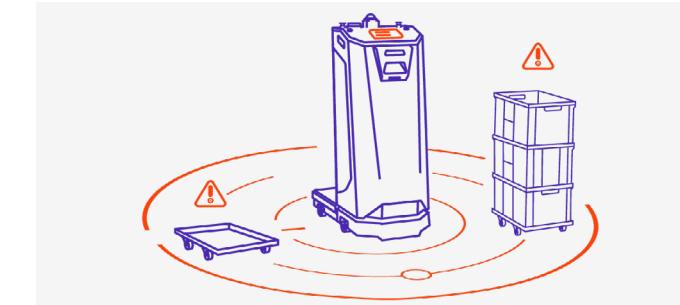
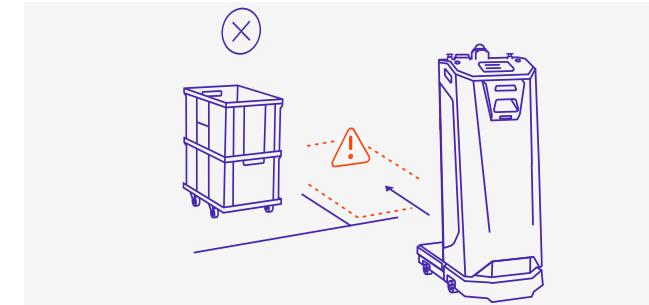
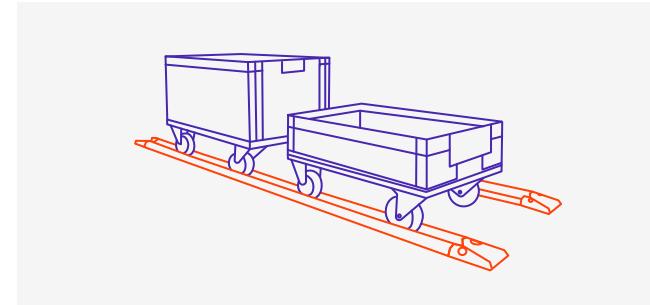
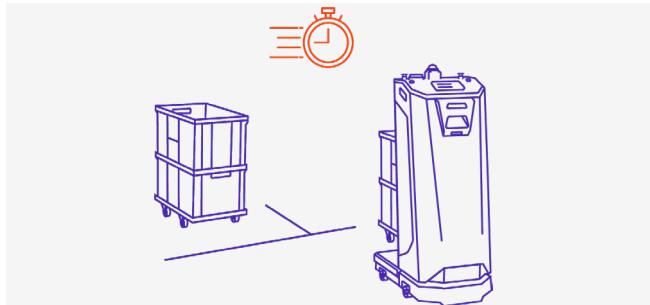


User-friendly human-machine interface

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.

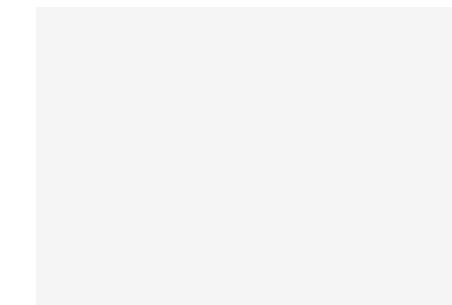
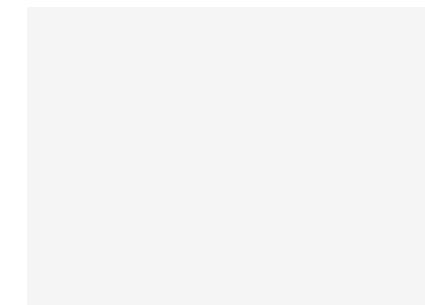
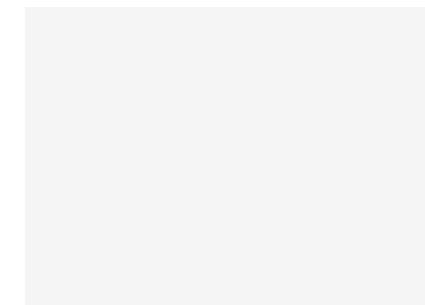
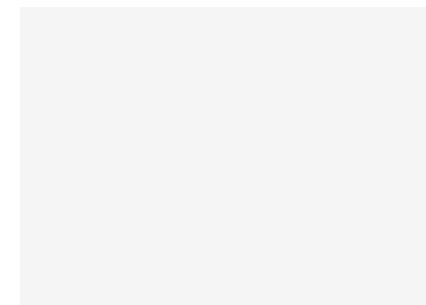
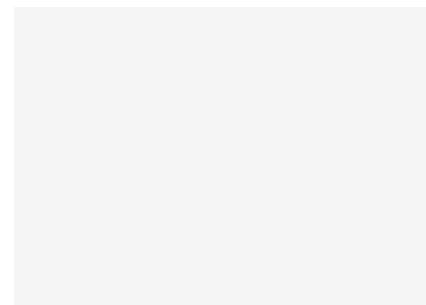
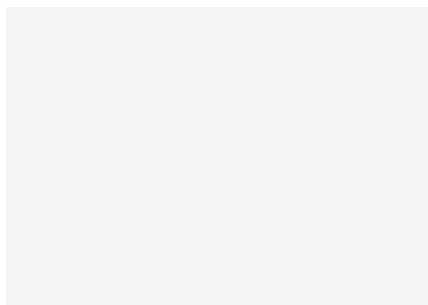
Empty space drop

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)

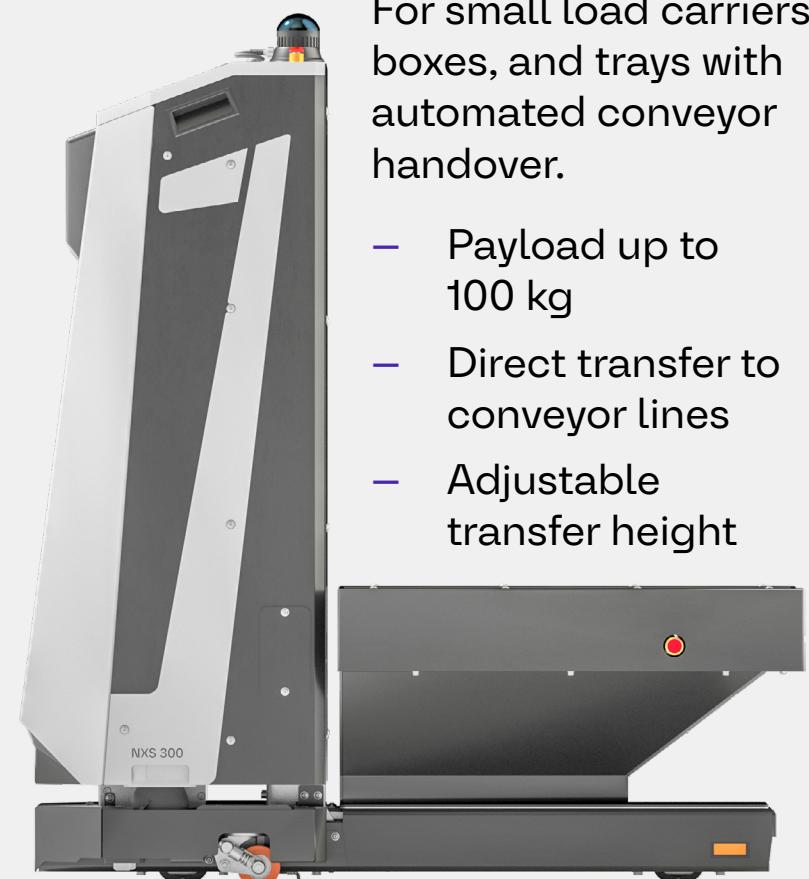
- 300 kg payload capacity
- Perfect for transporting heavier or bulkier components
- Supports flexible integration into existing conveyor and storage systems



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



Hover over this icon to see the associated use cases. A small blue circular icon with a white letter 'i' inside, with a thin blue line extending from its top right corner.

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.



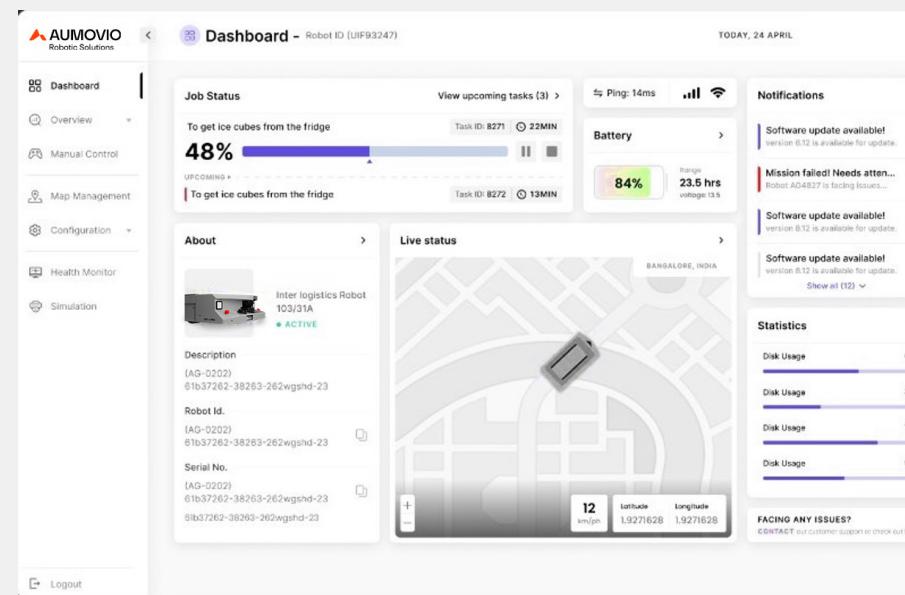
We optimize your AMR's performance whenever there's a need. Processes, goods, and materials can change.



Full transparency and always in control.

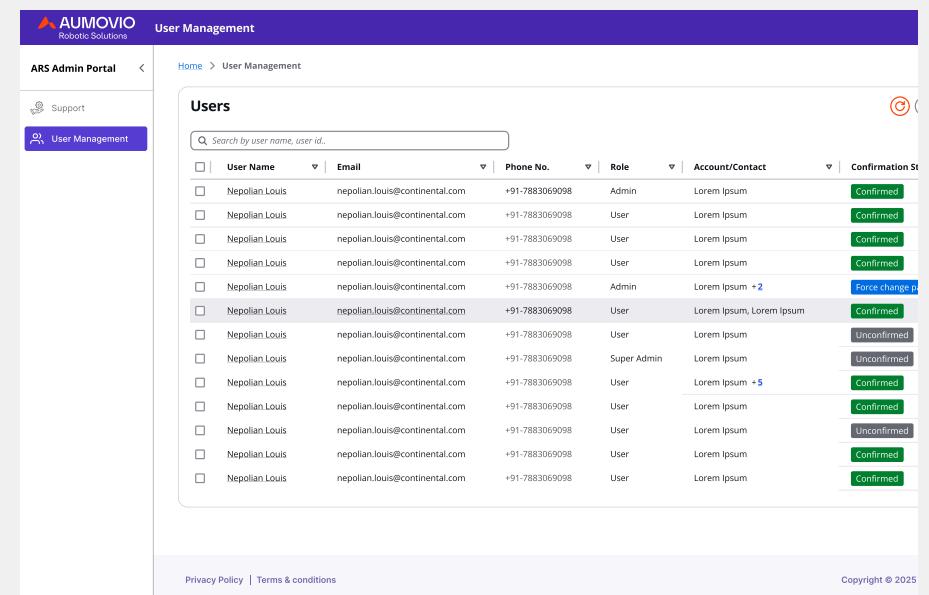
AUMOVIO AMR Software Ecosystem.

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



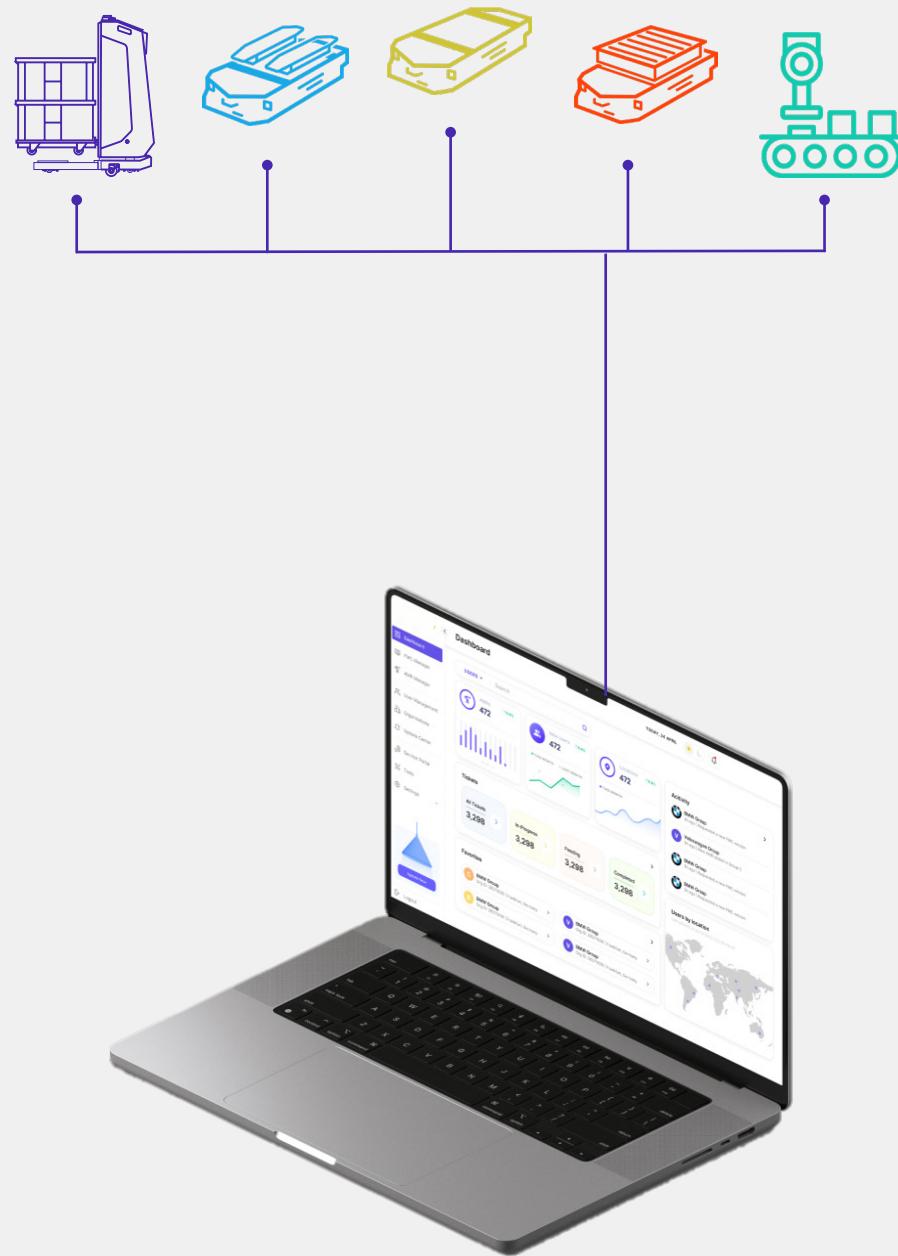
The dashboard displays the following information:

- Job Status:** To get ice cubes from the fridge, 48% complete.
- Battery:** 84% charge, 23.5 hrs range.
- Live status:** Inter logistics Robot 103/1A is active, located in Bangalore, India, with a map showing its current position and a 12 km radius.
- Notifications:** Software update available for version 0.12, mission failed, and software update for version 0.12.
- Statistics:** Disk usage for various drives.



The user management interface shows a list of users with the following details:

User Name	Email	Phone No.	Role	Account/Contact	Confirmation Status
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	Admin	Lorem Ipsum	Confirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum	Confirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum	Confirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum	Confirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	Admin	Lorem Ipsum + 2	Force charge pending
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum, Lorem Ipsum	Confirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum	Unconfirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	Super Admin	Lorem Ipsum	Unconfirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum + 5	Confirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum	Confirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum	Unconfirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum	Confirmed
Nepolian Louis	nepolian.louis@continental.com	+91-7883069098	User	Lorem Ipsum	Confirmed



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

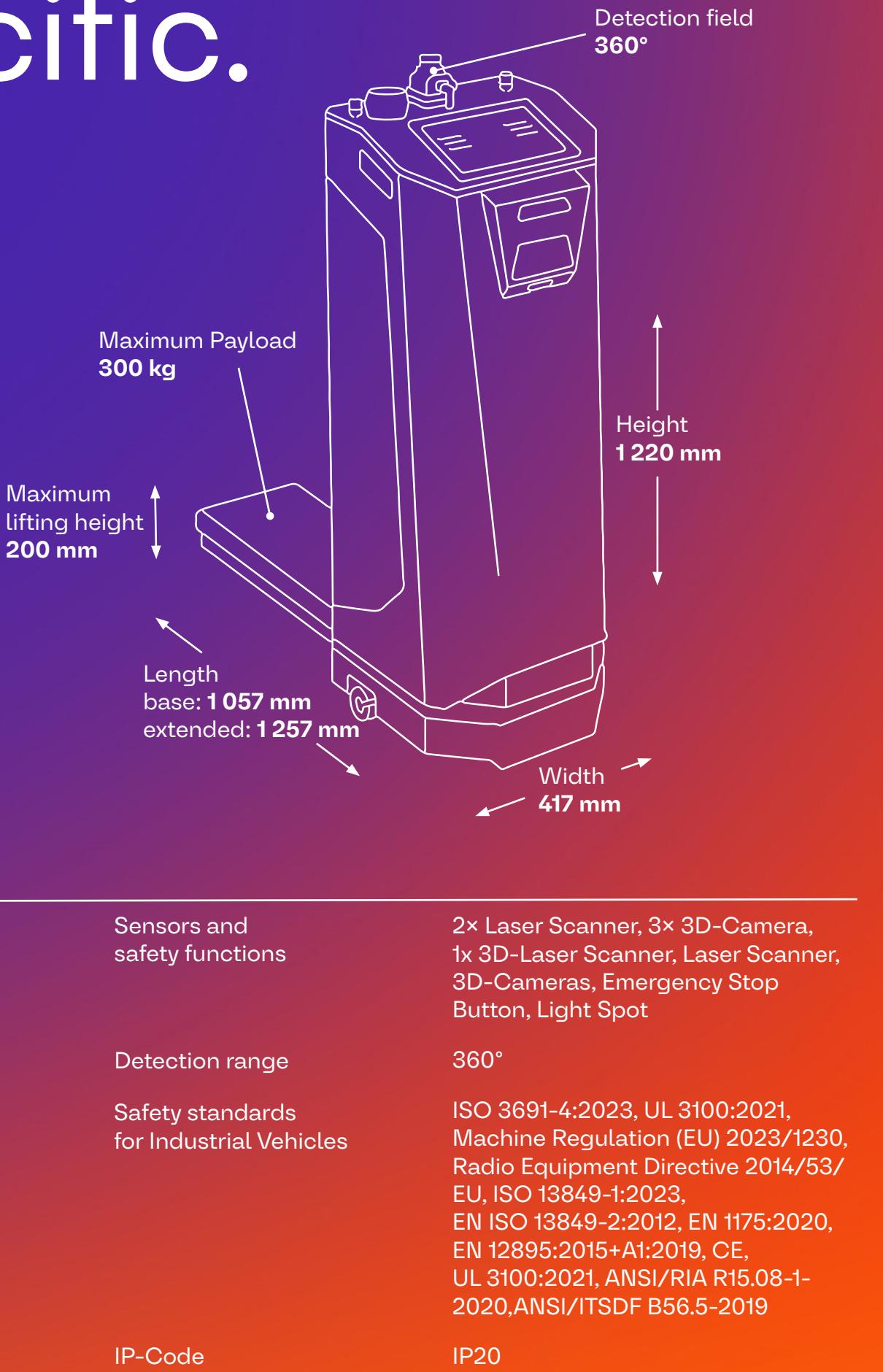
NAiSE

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
	Weight	165 kg
Performance Characteristics	Maximum payload	300 kg
	Maximum lifting height	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)
Power Supply	Positioning accuracy	Fine positioning: ± 20 mm
	Battery type	Li-Ion / 48 V / 2,5 kWh
	Charging current	30 A
Environment	Charging strategy	Opportunity Charging
	Charging time	1:20 h
	Ambient temperature	5°C – 40°C
Connections	Humidity	10 % – 90 % @ 39°C, non-condensing
	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	
	Detection range	
	Safety standards for Industrial Vehicles	
	IP-Code	





Let's get things done
Automatically.

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