





# **AMRCore**

A versatile, industry proven Autonomous Mobile Robot Starter Kit.

Accelerate your AMR development. Easily configured for your specific use. Add required vehicle body and modules. Ready to work out of the box.

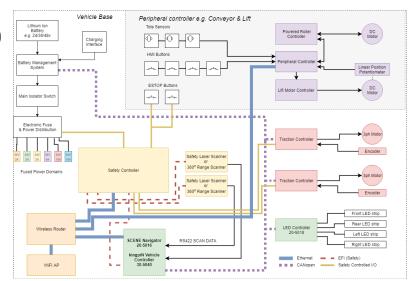
Significantly reduce Autonomous Vehicle development time with AMRCore – a fully functional AMR Starter Kit.

Navigates using natural feature navigation and is easily configured for your specific application. Simply add your desired vehicle body and you're ready to go!

AMR development has never been simpler – AMRCore includes a Build Book and Bill of Materials and is ready to work out of the box!

AMRCore is easily configured as:

- Mobile Conveyor (with/without elevator)
- Tote Carrier Shelving Unit
- Mobile Robot Arm
- Tote Carrier
- Tow Tractor
- Submarine AGV



AMRCore Vehicle System Block Diagram



### **AMRCore**

#### A versatile, industry proven Autonomous Mobile Robot Starter Kit.

## **Applications include:**Health Care

- Automobile Assembly
- Material Handling
- Pick and Place
- Warehouse/Production
- Shuttle System

#### **Controller Specification**

Uses	
Typical applications:	Piece pick and place autonomous transport for logistics, industrial and healthcare industries
Dimensions Base Unit	
Length x Width x Height	815 x 510 x 210mm (461 Wi-Fi antenna vertical)
Ground clearance	Chassis: 40mm, Charging contacts:16.3mm
Wheel Diameter	200mm
Weight (without body)	30kg
Drive type	Differential
Centre of Gravity	Centralised within vehicle body
Payload	
Capacity	120kg
Power	
Battery	Lithium Ion 24V, 20Ah.
Charge type	Floor plate allows for self-docking and charging (not included).
Run Time	6hrs/ 60% duty cycle (dependent on load).
External charging options:	Charging station.
Speed and Performance	
Max speed (Forward and Reverse)	Up to 2m/s
Max acceleration/deceleration	0.5m/s/s
Positional Accuracy (Travel)	+/- 10mm
Positional Accuracy (Docking	+/- 10mm
Turning circle	0mm radius (turn on the spot)
Environment	
Temp Range	Operating Temperature: 0°C to 40°C
Communications	
Wi-Fi	Router: 2.4 GHz and 5 GHz, 2 external antennas
Navigation	
	Natural Feature Navigation
Safety	
	Integrated safety features, emergency stop buttons and obstacle detection sensors
Construction	
Chassis	Aluminium
Certification	
	CE

An award-winning pioneer in guidance, navigation and control technologies, Guidance Automation has over 25 years' experience in developing advanced solutions for the global robotic vehicle market and has thousands of systems in service.

Our aim is to consistently meet our clients' needs by offering automated guided vehicle technologies which serve the market need and improve operational performance and efficiency.

We are proud to have enabled our clients to automate robotic vehicles, fork lift trucks, floor cleaning equipment and all types of mobile moving systems. These solutions have been applied in a broad range of autonomous transport applications such as airports, warehousing, healthcare, production, bottling plants, printing, retail, marine and more.

We are committed to the continuous advancement of innovative and optimal vehicle automation.



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