



troNnik-100

Universal Autonomous Mobile Robot

Minimise repetitive and unproductive tasks in pick and place applications including e-commerce fulfilment, warehousing, distribution and production.

troNnik-100: A fully functional, collaborative Autonomous Mobile Robot. Navigates using natural feature navigation and is easily configured for your specific application.

Simply mount your required payload carry/transfer module on the troNnik vehicle base and you're ready to go! Users and system integrators can easily implement their own auxiliary function controls to meet carry/transfer requirements (e.g. conveyor controls, tow hook ups etc.).

Our expert engineering services are available, if required, to support your complete development process.

troNnik-100 is easily configured as:

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

Our collaborative AMRs can easily be deployed to enhance existing operations without disruption or reconfiguration and contribute an immediate and significant improvement in throughput efficiency and error reduction.

- REDUCE time operatives spend DRIVING/WALKING
- REDUCE pick/place ERRORS
- OPTIMIZE throughput with INTELLIGENT task ordering/route selection
- FOCUS operatives on VALUE-ADD work
- ADAPT to fluctuating demand/seasonal peaks

 **Guidance
automation**

Optimize your Material Handling processes with Guidance Automation's Autonomous Mobile Robots.

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 within logistics, industrial and healthcare industries
Dimensions Base Unit	
Length x Width x Height	950 x 630 x 315mm (461 Wi-Fi antenna vertical)
Ground clearance	Body work: 40mm, Charging contacts:16.3mm
Wheel Diameter	200mm
Weight (without modules)	40kg
Drive type	Differential
Centre of Gravity	Centralised within vehicle body
Payload	
Capacity	110kg
Power	
Battery	Lithium Ion 24V, 20Ah.
Charge type	Floor plate allows for self-docking and charging (not included).
Run Time	6hrs/ 60% duty cycle – (dependant 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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