



OTTO 100

Versatility and durability in a small, powerful package

OTTO 100 is an industrial strength Autonomous Mobile Robot (AMR) that safely moves boxes, bins, carts and payloads up to 150 kg (330 lb) to increase material handling throughput in factories and warehouses.



Uncompromised performance

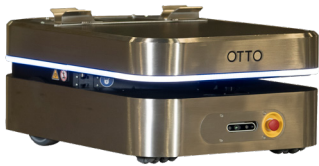
With a rugged all-metal body construction, integrated lift and 2 m/s travel speeds, OTTO 100 is built to perform in the world's toughest manufacturing environments year after year.

Countless Applications

Designed for quick setup and deployment, the versatile OTTO 100 autonomously handles a wide range of workflows and applications. The latest laser and 3D camera sensors make it safe enough to work alongside your people.

Comprehensive Service

Comprehensive 24/7 fleet service plans ensure your AMRs are always operating at peak performance. Managed service plans are also available for improved planning and predictability.



OTTO 100 v2.5

OTTO 100 is an industrial strength Autonomous Mobile Robot (AMR) that safely moves boxes, bins, carts and other payloads up to 150 kg to increase material handling throughput in factories and warehouses.

PERFORMANCE			
Max. Payload	150 kg (331 lbs)	Max. Turning Speed	1.25 rad/sec (75°/sec)
Max. Speed	2.0 m/s (4.5 mph)	Max. Docking Speed	0.3 m/sec (0.7 mph)
Docking Accuracy Standard	± 10mm (x,y), ± 1°φ (yaw) Repeatable to 3σ	Min. Aisle Width (One Way)	1099 mm (43 in)
Docking Accuracy Precision Upgrade ¹	± 5mm (x,y), ± 1°φ (yaw) Repeatable to 3σ	Min. Aisle Width (Two Way)	1975 mm (78 in)
		Integrated Lift	62 mm (2.44 in) stroke, 150 kg capacity
CHASSIS			
Dimensions	740 x 550 x 308mm (29.1 x 21.7 x 12.1 in)	Suspension	Fixed, rigid
Mass	107 kg (236 lbs)	Ground Clearance	6 mm (0.25 in)
Turning Radius	Turn in place	Traversable Gap	13 mm (0.5 in)
ENERGY SYSTEM			
Battery Capacity	40 Ah	Battery Voltage	26.4 V
Runtime (10% to 90%)	6 hr	Battery Life	3,000 full charge cycles
Max. Charge Rate	40 A	Battery Charging Options	Autonomous Opportunity Charging (Default) Manual Charging
Charge Time (10% to 90%)	60 mins		
SAFETY SYSTEM			
E-Stop	2 E-Stops (front and back) + user E-Stop circuit interface	Standards Compliance	ISO EN 12100, ISO EN 13849-1, ISO 3691-1 (supercedes EN 1525), EN 60204-1, CE, FCC
Manual Control	Guided autonomous control available via OTTO software interface.		
AUTOMATION INTERFACE		CONTROL SYSTEM	
Power Interface	26.4 VDC, 12A max, unregulated	Sensors	Hokuyo Safety Laser Scanner, 3D Camera with 90° front coverage, ToF rear sensor with 90° reverse coverage
Signal Interface	1x Ethernet, 1x USB 3.0, 1x serial RS-232		
Safety Interface	2x E-stop extension, 8x Digital IO, 2x dry contact relays, 1x Auxiliary Monitor Contact	Communication	WiFi 2.4 / 5 GHz (802.11 a/b/g/n/ac)
ACCESSORIES (Sold Separately)		ENVIRONMENTAL	
Load-Handling	Staging Cart (130 kg) Magnetic Line Follower	IP Classification	IP20
		Temperature	20° to 40° C
Charging	Autonomous Supercharger (40 A) Manual Trickle Charger (25 A)	Max. Humidity	95%, non-condensing

Footnotes:

¹ Requires OTTO High Accuracy Docking System (HADS) upgrade, sold separately

For more information visit www.amrobotics.eu
or call us at +31(0) 547 388 599