

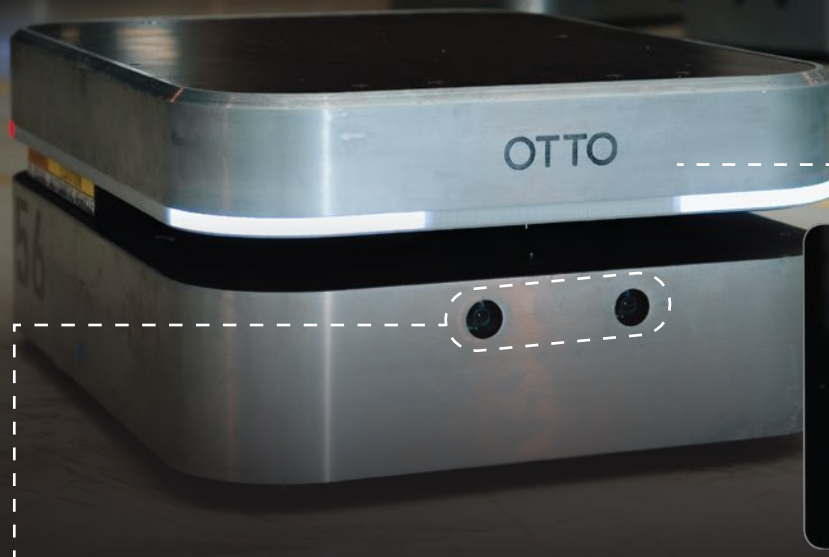
OTTO

MOTORS

Automate materials movement.
Boost productivity.
Transform your facility.

Uncompromised durability and performance

With a rugged all-metal body construction, rocker-style suspension and best-in-class electric powertrain, OTTO SDVs are built to perform in the world's toughest manufacturing environments year after year.



Safety-rated and people-friendly

Equipped with the latest laser and 3D camera sensors, OTTO vehicles are smart enough to operate autonomously even in the most dynamic manufacturing environments, and safe enough to work alongside your people.

Built for true enterprise scale

Easily manage a single OTTO or hundreds, connect them to your production tools and systems through flexible APIs, or access fleet analytics via the industry's most powerful enterprise fleet management software – OTTO Fleet Manager™.

Transform materials movement with OTTO

Trusted by Fortune 500 companies across the globe, The OTTO solution includes the industry's most durable SDVs and attachments plus mission control software to manage a single vehicle or an entire enterprise fleet - easily and securely. Smart enough to navigate your facility without the need for magnetic guides or infrastructure, and safe enough to work alongside your people, OTTO moves material through your facility, faster and more efficiently than ever before.

Technical Specifications



OTTO 100



OTTO 750



OTTO 1500

APPLICATION	OTTO 100 autonomously moves boxes, bins, and other lightweight payloads.	OTTO 750 autonomously moves pallets, racks, and other medium-sized payloads.	OTTO 1500 autonomously moves pallets, racks, and other heavy payloads.
SPEED AND PERFORMANCE			
Maximum Total Payload	100 kg (220 lbs)	750 kg (1653 lbs)	1500 kg (3306 lbs)
Maximum Speed	2.0 m/s (4.47 mph)	2.0 m/s (4.47 mph)	2.0 m/s (4.47 mph)
Turning Radius	0 mm	0 mm	0 mm
Suspension	Fixed	Passive	Passive
Docking Accuracy	X,Y Accuracy \pm 1cm, Yaw \pm 1° Docking accuracy is subject to the deployment. Please speak to your OTTO Motors representative for more information.	X,Y Accuracy \pm 1cm, Yaw \pm 1°	X,Y Accuracy \pm 1cm, Yaw \pm 1°
SIZE AND WEIGHT			
Dimensions	740 x 550 x 301 mm (29.1 x 22 x 12 in)	1810 x 1190 x 351 mm (71 x 47 x 13.85 in)	1810 x 1190 x 351 mm (71 x 47 x 13.85 in)
Mass	127 kg (280 lbs)	525 kg (1157 lbs)	525 kg (1157 lbs)
BATTERY AND POWER SYSTEM			
Nominal Battery Voltage	27.6V	51.2V	51.2V
Battery Capacity	40Ah	100Ah	100Ah
Managed Battery Charging	OTTO SDVs are capable of 24/7 continuous operation with ~85% individual vehicle availability. This is achieved with automated opportunistic charging without human intervention. Battery charge levels are intelligently managed by the OTTO Fleet Manager™ software.		
INTERFACING AND COMMUNICATIONS			
Attachments and Accessories	Staging cart with user configurable options including shelving	Conveyor, Lift, OTTO charge dock, portable manual charger, manual drive pendant, load plate	
Integrated Lift	62 mm (2.44") stroke, 100 kg capacity	Separate attachment	Separate attachment
Communication	Wifi (802.11 a/b/g/n/ac, 5 Ghz)	Wifi (802.11 a/b/g/n, 5 Ghz)	Wifi (802.11 a/b/g/n, 5 Ghz)
Attachment Control Systems Power	24VDC 10A, unregulated, unswitched	24VDC 5A, regulated, unswitched	24VDC 5A, regulated, unswitched
Attachment Supply Power	27.6VDC nominal 10A, Unregulated, unswitched battery power	51.2VDC nominal 50A, Unregulated battery power, switched with safety circuit	
Custom Attachment Interface*	1 x Ethernet POE, 2 x USB 3.0, 16x DIO (8x DI, 8x DO), e-stop extension, 1x serial RS-232, 2x dry contact relays	1x Ethernet, 1x USB 2.0, 1 CAN bus, 2 general purpose inputs and outputs, 1 payload attachment control line, 1 payload attachment fault line, dual channel emergency stop breakout	
SAFETY AND AUTONOMY SENSORS			
Sensors and Cameras	Hokuyo Safety Laser Scanner, 3D Cameras with 90° front coverage, ToF rear sensor with 90° reverse coverage	SICK s3000 Safety System for 360° visual protection, 3D Cameras for 120° detection front and back from 0-1,700mm above floor	
Lights and Emergency Stopping	Perceptive 360° LED lighting, 1 emergency stop button	Perceptive 360° LED lighting, 4 emergency stop buttons	

Trusted by Fortune 100 brands including GE, Toyota and Caterpillar, The OTTO Materials Movement Platform provides automated and on-demand material handling in the most demanding industrial environments spanning automotive, medical device, aerospace, logistics and more.

For more information visit
www.ottomotors.com
 or call us at
1-844-SEE-OTTO (1-844-733-6886)

