

Technical Specifications

OTTO 100

OTTO 100 is a compact and powerful autonomous mobile robot (AMR), designed to move boxes, bins and carts up to 150 kg across countless person-to-person applications. With a durable all-metal body and the latest safety-rated equipment, OTTO 100 is built to operate safely and effectively in the toughest manufacturing environments.



RELIABLY RUGGED

With an all-metal body, rely on OTTO 100 to continue moving your materials in challenging environments, year after year.

INTEGRATED LIFT

Carry a wide range of items in a simple, economical way by seamlessly pairing its integrated lift with an OTTO Cart.

DIVERSE WORKFLOWS

From lineside delivery to work-in-progress transport, OTTO 100 can easily shift between workflows.

PERFORMANCE

| | | | |
|--|--|----------------------------|---|
| Max. Capacity | 150 kg (331 lb) Includes payload, attachments, and cart, if any | Max. Turning Speed | 1.25 rad/sec (75°/sec) |
| Max. Speed | 2.0 m/sec (4.5 mph) | Max. Docking Speed | 0.3 m/sec (0.7 mph) |
| Docking Precision Standard ¹ | ± 10 mm (x,y) ± 1° (yaw) | Min. Aisle Width (One Way) | 1,099 mm (43 in) |
| Docking Precision Upgrade ^{1,2} | ± 5 mm (x,y) ± 1° (yaw) | Min. Aisle Width (Two Way) | 1,975 mm (78 in) |
| | | Integrated Lift | 62 mm (2.44 in) stroke, 150 kg capacity |

¹See Operation and Maintenance Manual (OMM) for further details.

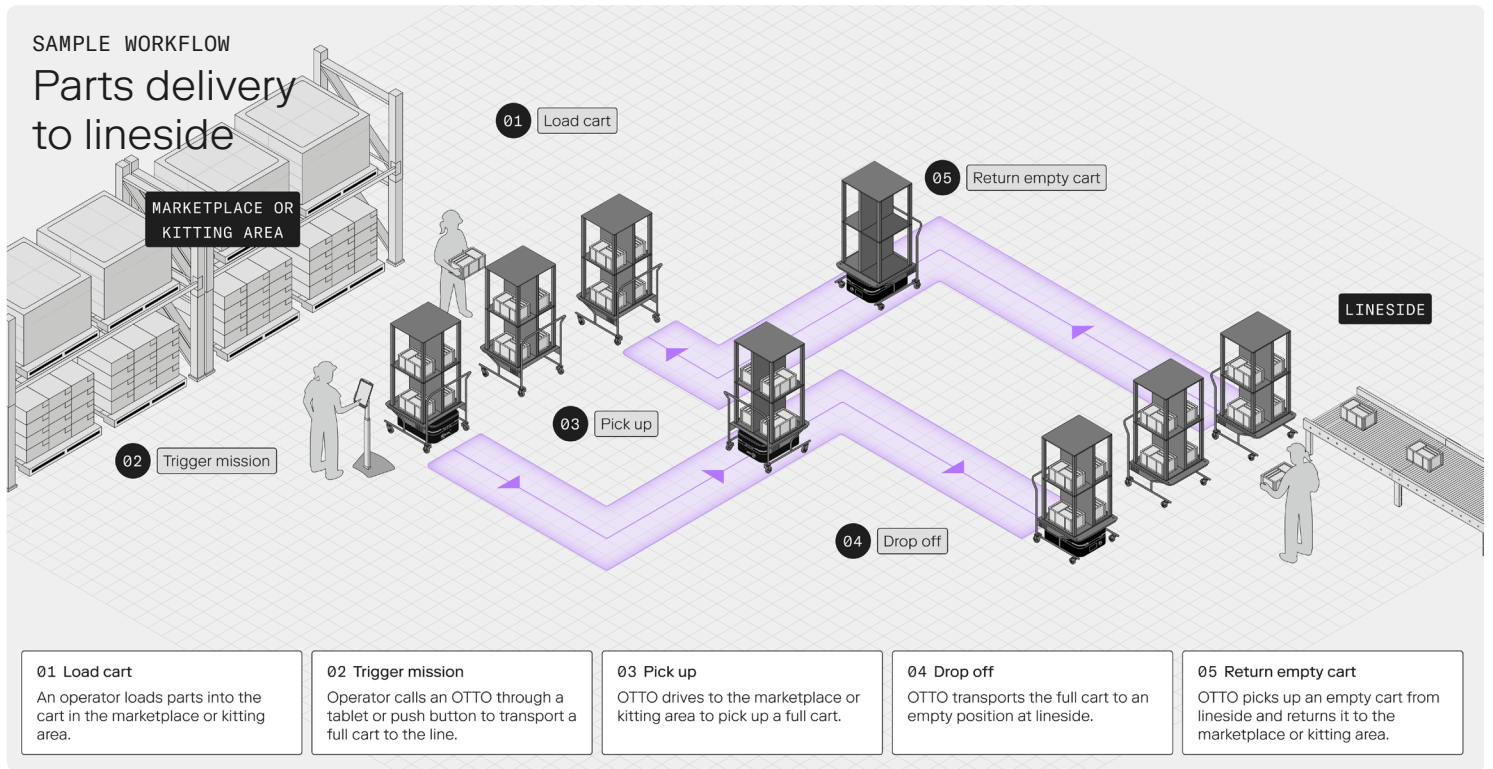
²Requires OTTO High Accuracy Docking System (HADS) upgrade, sold separately.

CHASSIS

| | | | |
|----------------|--|------------------|----------------|
| Dimensions | 740 x 550 x 308 mm (29.1 x 21.7 x 12.1 in) | Suspension | Fixed, Rigid |
| Mass | 107 kg (236 lb) | Ground Clearance | 6 mm (0.25 in) |
| Turning Radius | Turn in place | Floor Obstacle | 13 mm (0.5 in) |

ACCESSORIES (SOLD SEPARATELY)

| | |
|----------|---|
| Charging | Autonomous Supercharger (98 A) Manual Trickle Charger (25 A) |
|----------|---|



ENERGY SYSTEM

| | | | |
|--------------------------|--------|--------------------------|--|
| Battery Capacity | 35 Ah | Battery Voltage | 26.4 V |
| Runtime (90% to 10%) | 6 hr | Battery Life | 10,000 full charge cycles |
| Max. Charge Rate | 98 A | Battery Charging Options | Autonomous Opportunity Charging (Default) Manual Charging |
| Charge Time (10% to 90%) | 18 min | | |

SAFETY SYSTEM

| | | | |
|----------------|--|----------------------|--|
| E-Stop | 2 E-Stops (front and back) + user E-Stop circuit interface | Standards Compliance | CE marked, ANSI/ITSDF B56.5, RIA R15.08-1, ISO 12100/13849-1/3691-4, FCC Part 15 Subpart B / ICES-003, ICES-002, EN 1175-1/60204-1 |
| Manual Control | Guided autonomous control available via OTTO software interface. | | |

AUTOMATION INTERFACE

| | | | |
|------------------|---|------------------|---|
| Power Interface | 26.4 VDC, 12 A max, unregulated | Safety Interface | 2x E-stop extension, 8x Digital IO, 2x dry contact relays, 1x Auxiliary Monitor Contact |
| Signal Interface | 1x Ethernet, 1x USB 3.0, 1x serial RS-232 | | |

CONTROL SYSTEM

| | | | |
|---------|---|---------------|--------------------------------------|
| Sensors | Hokuyo Safety Laser Scanner, 3D Camera with 90° front coverage, ToF rear sensor with 90° reverse coverage Inductive cart detect sensor | Communication | WiFi 2.4 / 5 GHz (802.11 a/b/g/n/ac) |
|---------|---|---------------|--------------------------------------|

ENVIRONMENTAL

| | | | |
|-------------------|------|-------------|----------------------|
| IP Classification | IP20 | Temperature | 20 to 40° C |
| | | Humidity | 0-95% non-condensing |

For more information visit ottomotors.com/100
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