

LD-250 Mobile Robot

Product Guide



Overview

The LD-250 is the latest addition to Omron's LD family of autonomous mobile robots. With a payload capacity of 250kg, the LD 250 enables customers to move larger and heavier payloads, minimizing trips while simultaneously increasing the return on investment.

For a fully automated material handling solution, Omron's Fleet Manager helps optimize the performance of an entire fleet of mobile robots. The incorporation of the LD-250 makes a robot fleet more diverse while still being controlled through the same system.

Applications

- Transport of large, bulky automotive parts
- Semiconductor wafer fab materials transport
- Moving cardboard boxes to packaging lines
- Fulfillment of eCommerce orders in warehouses
- Linen and surgical instrument delivery in hospitals
- Moving finished jewelry molds to casting stations

Primary Benefits

- Enables greater productivity with less equipment
- Promotes a highly mixed mobile robot fleet
- Expands the options for customization
- Functions well in tough industrial environments
- Provides a faster return on investment

Key features

- 250kg payload capacity
- Extra-tough metal skins
- Same proven technology as other LD robots
- Industrial grade metal chassis
- Compatible with full line of Omron AMRs
- Open and customizable platform
- Easy to use
- 13hr runtime between charges
- Capable of operating in fleets of up to 100 AMR's
- Backed by Omron's global service and support network

LD Series Product Selection



Item	LD-250 OEM	Note
Material	Aluminum	
Payload	250 kg	
Weight	148kg (with battery) 129kg (without battery)	
Dimension (L × W × H)	963 x 718 x 383 (mm)	*height to top plate
IP Rating	IP20	
Maximum Speed	1.2 mm/s	
Maximum Rotation Speed	120°/s	
Stop Position Accuracy	± 100 mm position*, ± 2° rotation	*±10 mm position, ±0.5° rotation with High Accuracy Positioning System (HAPS) option. *±25 mm position ±0.3° rotation with Cell Alignment Positioning System (CAPS) option.
Battery	22-30 VDC	
Battery Capacity	72 Ah Battery cell nominal capacity	
Run Time	13 hours (continuous) approx.	With no payload condition
Recharge Time	4 hours (5:1 ratio) approx.	
Battery Life Cycles	2,000 recharge cycles (battery cell nominal)	
Charging Method	Automatic / manual	
Auxiliary Power	5 VDC±5%, 1A switched Aux power 12 VDC±5%, 1A switched Aux power 20 VDC±5%, 1A switched Aux power 22-30 VDC, 4A switched × 2 22-30 VDC, 10A switched* 22-30 VDC, 10A safe, switched*	5, 12, 20 and 22-30 VDC power can be provided to external devices* *10A switched and 10A safe, switched share the 10A of current