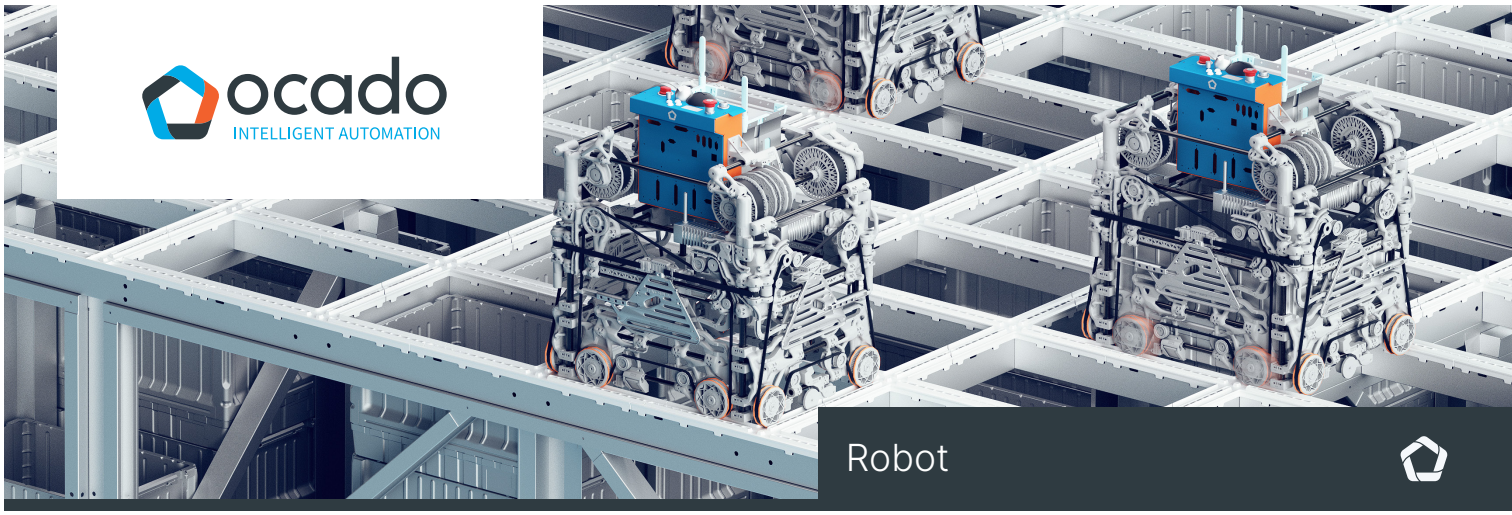


ocado
INTELLIGENT AUTOMATION

Robot

The Lightest, Most Efficient Robot Behind The World's Fastest Cubic Storage And Retrieval.

Ensuring high robot availability is key to maintaining pick productivity and cost efficiency in any high throughput fulfillment operation - especially during periods of high demand like peak season.

The Ocado Storage and Retrieval System (OSRS) robot is a high-speed, high-productivity worker that does the time-consuming job of fetching and dropping off bins with inventory, whether to human-assist pick stations or our fully automated robotic pick arm.

Our patented single-grid cell footprint design allows robots to pass one another unobstructed, follow the most optimized route plans, and maintain industry-leading availability and access to stock.

Whether you need 30 or 3000 robots to meet your operational demand, the system scales with minimal downtime thanks to our battery swap exchange and charging, and proprietary wireless communications.

Built from 50% 3D printed materials and with a strong carbon fiber frame, each robot is ultra-lightweight with high acceleration and top speeds. This facilitates up to 1200 bin presentations per hour by a fleet of robots at each pick station, with 39% energy savings.

The OSRS robot moves quickly around the top of the grid to lift and lower goods in bins, to and from workstations, for picking or stock replenishment.

Key Features

HIGH-SPEED PRODUCTIVITY:
A fleet of robots can present up to 1200 Bins/hr per station for unsurpassed throughput and faster order delivery

SINGLE GRID CELL FOOTPRINT:
Our patented design reduces robot traffic to maximize stock access and robot availability

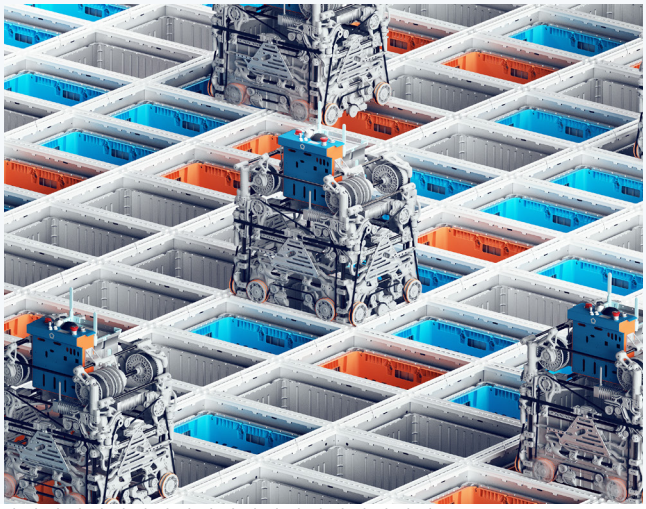
BATTERY SWAP TECHNOLOGY:
Provides high capacity, automated battery exchange and charging for maximum grid robot uptime

LIGHTWEIGHT AND STRONG:
3D printing and carbon fiber construction drive 39% energy savings and a safer system for customers

MULTI-ENVIRONMENT:
Can operate in seismic regions, and across ambient and cold storage temperature zones

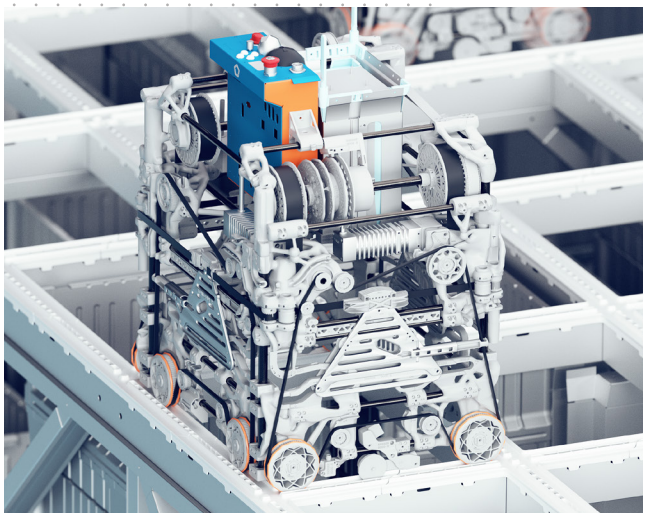
CUTTING-EDGE WIRELESS COMMS:
Enables 1000s of robots to run concurrently with message delivery every 100ms

Visit ocado-ia.com for additional information and to talk to an expert



ROBOT:

Energy Consumption Is 39% Lower With Our Next–Gen Robot



Technical Specifications

PERFORMANCE:

Robot fleet bin presentations: Up to 1200 per hour per workstation
Time to charge: Sub-60 seconds every 2 hours (via battery swap)
Operating Environment: Temperature: +2 to +35°C Humidity: 20-80%

BIN DATA:

Payload: Up to 35kg
Max bin dimensions: Up to L 652mm x W 451mm x H 400mm

PHYSICAL DATA:

Robot dimensions: L 746mm x W 546mm x H 991mm
Robot weight: 55kg
Materials: 50% Industrial 3D printed components

RESOURCE REQUIREMENTS:

Avg power consumption: 110W
Voltage: Max voltage 58.8V
Battery: 1.1kWh lithium-ion battery

KEY COMPONENTS:

- Robot assembly (including bin hoist)
- Battery chute (for vertical swapping of battery)
- Comms electronics for command and control
- Safety electronics

CERTIFICATIONS:

- CE & NRTL Approval

Key Statistics

<60s

Charge Time/2hrs (via Battery Swap)

1200

Up to 1200 Bin Presentations Per Hr, Per Workstation By A Robot Fleet

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