

AR 250

Autonomous Mobile Robot

The AR 250 is a lightweight versatile AMR built to optimize material flow in dynamic environments with intelligent navigation, modular flexibility, and human-safe operations.

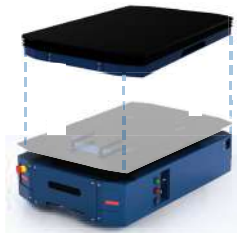


1 HUMAN-SAFE OPERATIONS



- ✓ PLd category 3 certified
- ✓ Laser safety fields respond before a person gets close
- ✓ No cages
- ✓ No zone restrictions

2 MODULAR LOAD HANDLING



- ✓ Interchangeable top modules
- ✓ Nine configurations
- ✓ One platform, multi-application deployment

3 AUTONOMOUS NAVIGATION



- ✓ Detects obstacles in time, reroutes autonomously without interruption
- ✓ No floor tape, no manual intervention, no down-time

4 INTEROPERABLE ARCHITECTURE



- ✓ VDA 5050 compliant
- ✓ Enables vendor-agnostic scalability

5 REAL-TIME ALERTS & STATUS INDICATION



- ✓ Audio alerts for operator notification
- ✓ No screen dependency

6 MULTI-SIDE STATUS LIGHTING



- ✓ Front and rear LED indicators
- ✓ Workers know the robot's intent before it reaches them

7 OPPORTUNITY CHARGING



- ✓ Autonomous opportunity charging during task intervals sustains continuous operation without scheduled downtime

8 BUILT-IN MISSION CREATOR



- ✓ Configure tasks, update routes, and adapt to layout changes on the fly
- ✓ No programmer required, just an intuitive interface your team can own

Technical Specification



Sensors

2D LiDAR - 2 units
3D Camera - 1 unit



Communication

WiFi (2.4/ 5GHz)
802.11 (b/n/ac)



Max. Speed

4.32 km/h
(2.6 mph or 1.2 m/s)



Safety Control

PLd cat. 3 Safety
Scanners, Emergency
Stop buttons - 2 units



Dimensions

900 x 580 x 275 mm
(34.4 x 22.8 x 10.8 in)



Max. Payload

250 kg (551.1 lbs)



Charging Time

1.5 Hours



Docking Accuracy

X,Y : ± 15 mm (0.59 in)
Yaw : $\pm 1.5^\circ$



Run Time

8 Hours

AR 250 Compatible Top Modules

Shelf Lifter



Autonomous trolley
lifting and transport
operations

Belt Conveyor



Autonomous trolley
lifting and transport
operations

Cobot Integration Module



Mobile manipulation
via third-party cobot
integration

Combined Lifter & Tunneling



Lifting standard loads
and tunnelling higher
payloads with the
same module

Pallet Lifter



Autonomous trolley
lifting and transport
operations

Auto Tugger



Automated trolley
material flow

Roller Conveyor



Precise transfer of
cartons, totes, and
unit loads

Manual Tugger



Operator-assisted
multi-trolley transport

Custom Unit Load



Gentle handling of
unit load structure