Veloce is our multi-carton picking robot that is used for storage and retrieval of bins from racks. It can handle inventory, returns, order consolidation, sorting operations and a variety of other tasks. Veloce can be integrated seamlessly with existing systems like pick-to-light systems, conveyors, AMRs, etc. for the desired flow of material, allowing you to experience flexible automation in your warehouse with its ecosystem.

Technical Specifications

General Specifications

Weight	550 kg
Dimensions	1509 x 930 x 5000 mm
Max payload per level	30 kg
Payload Dimension	600 x 400 x 200/400 mm
Max rated payload	240 kg
Aisle Width	1100 mm
Max picking height	4400 mm
Ground Clearance	30 mm

Technical Specifications

Speed and Performance

Max operating speed	1.5 m/s
Acceleration	0.5 m/s^2
Positioning accuracy	± 20 mm
Telescopic fork speed	1.0 m/s
No. of levels	1 to 11

Communications & Integration

Wi-Fi	(802.11 a/b/g/n/ac, 2.4GHz, 5 GHz)
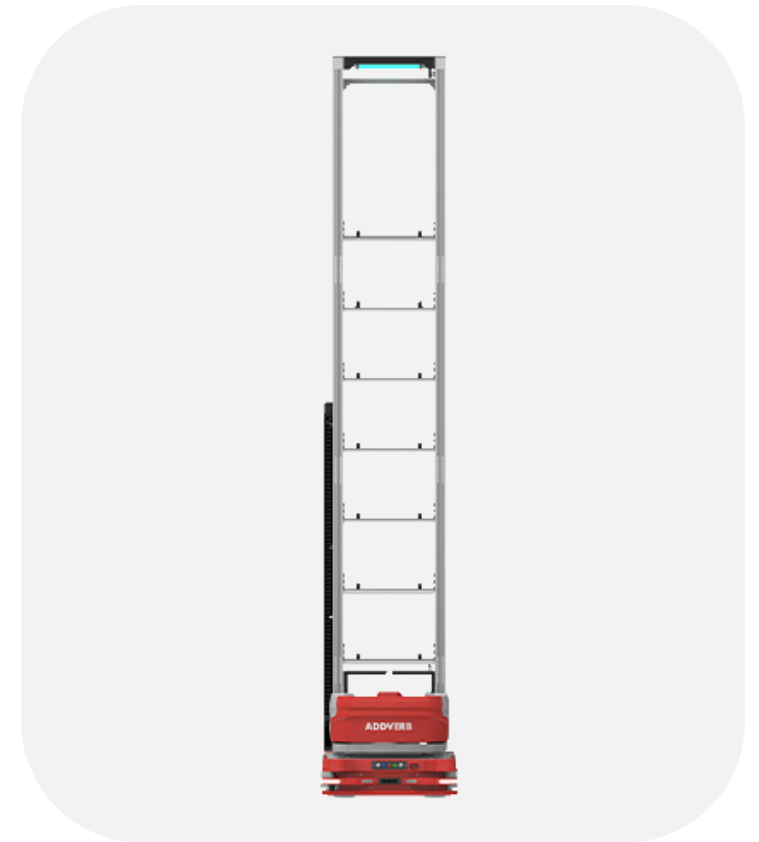
Technical Specifications

Battery

Type	LTO, 48V, 22Ah
Charging time (20-90%)	15 min
Running time (90-20%)	3 hours
Fully Automatic Charging Solution	

Safety

Emergency Stops	Yes, 4
LiDARs	Yes, 2
Safety PLC	
CE Certified	

Key Benefits:

- Fast single/double deep storage and retrieval of versatile loads

- Reliable and 100% safe, operates in a dedicated area

- Ideal for flexible storage and retrieval of bins and crates

- Ease of installation and scalability for enhanced flexibility

- Easy to operate, with user friendly interfaces and advanced analytics dashboard

- Modular design can be customised as per roof clearance and non-standard sized totes

FEATURES

Marker Based Navigation

Veloce follows a marker-based path system to reach a specific location with high accuracy

Zone-Based Safety

Equipped with field sensors that have configurable safety fields according to different zones for obstacle detection

Fleet Management System

AI-powered - Fleet Management System to control robot fleet for optimised task allocation and traffic management

Fast Pick & Place Operation

Customisable for single and double deep racking. Picking height in the aisle can vary from 0.49 m up to 5 m

Audio and Visual Alerts

Warning lights & audible warning signals while approaching a turn or an obstacle; alarm signal & alarm sound in case of an encounter

Multi-Level Safety

Presence of multiple provisions for safety including emergency stops and LiDARs