



1. Dimensions & Weight

Overall Length × Width	494 mm × 494 mm
Overall Height	148 mm
Unit Weight (excl. battery)	32 kg

2. Performance

Rated Payload	300 kg
Max. Speed (Translation)	0.65 m/s
Max. Speed (Rotation)	0.6 rad/s
Stopping Accuracy (Repeatability)	±5 mm
Min. Aisle Width	700 mm
Turning Diameter	ø710 mm
Gradeability	1/6 (9.5°, 17%)
Gap-Crossing Capability	45 mm
Step-Climbing Capability	10 mm

3. Drive System

Drive Method	Ball-drive (spherical drive)
Drive-Ball Diameter	ø100 mm
Drive-Ball Material	Polyurethane
Motors	Brushless DC, 100 W × 3 axes

4. Power & Battery

Battery Type	Lead-acid
Voltage	24 V
Continuous Operating Time	3.5 h (at 0.3 m/s, smooth floor)
Charging Time	4 hours
Charging Method	Swappable battery / connector charging

5. Navigation & Sensors

Navigation Method	Visual SLAM
Cameras	4 units
Safety Sensor	Not equipped
Marker Installation	Not required

6. Communication & Interfaces

Motion-Control UI	Handheld remote / Web GUI / ROS communication
External Interface	Wired LAN / Wireless LAN (recommended environment)
Wireless LAN Standard	Wi-Fi 5(IEEE 802.11ac)
API	ROS 2 / MQTT / Web API
Host-System Integration	Integration available via API

7. Safety Functions

Emergency-Stop Button	Located on the unit side
Response on Obstacle Detection	Automatic deceleration & stop (optional)

8. Operating Environment

Operating Location	Indoor
Operating Temperature Range	0 ~ 40 °C
Humidity	Non-condensing
Floor-Surface Conditions	No water/oil wetting permitted
Proven Floor Surfaces	Concrete / checker plate / grating / rail grooves, etc.

9. Certifications & Standards

Certifications Obtained	Not yet certified
Compliant Standards	Not yet compliant

* Specifications are subject to change without notice. * Please contact us regarding customization.