



The Mobile Robot Company

Knowledge Center — Product Data Sheets · 2026-08-04

<https://info.mobilerobot.com/documentation/technical-reference/product-data-sheets>

Product Data Sheets

This page consolidates the J1600's data-sheet figures in one place and points to the detailed reference pages. Use it when you need the headline numbers fast; use the linked pages when you need every value.

PRELIMINARY SPECIFICATIONS

The January 2026 specifications are preliminary and subject to change. Confirm current figures with The Mobile Robot Company or your partner before making deployment decisions.

Headline specifications

Parameter	Value
Drive type	Electric
Rated payload	1,600 kg / approximately 3,500 lb
Maximum manual pallet pick/drop height	1,600 mm / 63 in
Automatic pallet delivery height	Floor level
Top speed	5.4 km/h / 1.5 m/s / 3.4 mph
Truck weight	980 kg
Vehicle size (forks lowered)	1,893 × 850 × 2,060 mm
Turning radius	1,501 mm
Navigation	3D LiDAR SLAM
Compute	Industrial NVIDIA Jetson AI computer
Interface	15-inch multi-touch HMI
Battery	24 V, 200 Ah lithium iron phosphate (LiFePO4)
Ingress protection	IP21
Operating temperature	5–40 °C / 41–104 °F
Automatic gradeability	0° / 0%
Basic connectivity	Wi-Fi optional
Advanced integration	VDA 5050, REST API, fleet manager, advanced mission planning

The 1.6 m lift height is a manual capability; autonomous delivery is at floor level. Top speed is exactly 5.4 km/h.

Operating environment

Parameter	Limit
Gradeability, automatic mode	0° / 0%
Gradeability, manual mode, no load	2.86° / 5%
Gradeability, manual mode, full load	1.72° / 3%
Maximum traversable bump height	25 mm / 1 in
Maximum traversable gap width	20 mm / 0.8 in
Operating temperature	5–40 °C / 41–104 °F
Relative humidity	20–80%, non-condensing
Floor flatness/levelness	TR34 FM3 / FF 25, FL 20

Load-carrier envelope

The J1600 requires an [open-base carrier with no bottom deck board](https://info.mobilerobot.com/products/j1600/pallet-and-load-compatibility/) (<https://info.mobilerobot.com/products/j1600/pallet-and-load-compatibility/>). Maximum load length and width are 1,250 mm / 49 in each, including overhang; maximum load height from the floor is 1,700 mm / 67 in. Supported types include the EPAL Euro Pallet, EPAL 3, EPAL 6, all GMA pallets with an open base, and any forkable open-base carrier within the size limits.

Compliance summary

The J1600 is [CE marked](https://info.mobilerobot.com/safety-compliance/certificates/ce-declaration-of-conformity/) (<https://info.mobilerobot.com/safety-compliance/certificates/ce-declaration-of-conformity/>) and [meets EU and US safety requirements](https://info.mobilerobot.com/safety-compliance/certificates/compliance-statements/) (<https://info.mobilerobot.com/safety-compliance/certificates/compliance-statements/>), including [EN ISO 3691-4:2023](https://info.mobilerobot.com/safety-compliance/standards/iso-3691-4/) (<https://info.mobilerobot.com/safety-compliance/standards/iso-3691-4/>) and [ANSI/ITSDF B56.5-2024](https://info.mobilerobot.com/safety-compliance/standards/ansi-itsdf-b56-5/) (<https://info.mobilerobot.com/safety-compliance/standards/ansi-itsdf-b56-5/>). The battery is tested to [UN 38.3](https://info.mobilerobot.com/safety-compliance/certificates/battery-un-38-3-documentation/) (<https://info.mobilerobot.com/safety-compliance/certificates/battery-un-38-3-documentation/>). See [how J1600 safety works](https://info.mobilerobot.com/safety-compliance/safety-overview/how-j1600-safety-works/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/how-j1600-safety-works/>) for the safety architecture.

Detailed reference pages

- [Dimensions](https://info.mobilerobot.com/documentation/technical-reference/dimensions/) (<https://info.mobilerobot.com/documentation/technical-reference/dimensions/>) — every vehicle, fork, and wheel measurement.
- [Electrical specifications](https://info.mobilerobot.com/documentation/technical-reference/electrical-specifications/) (<https://info.mobilerobot.com/documentation/technical-reference/electrical-specifications/>) — motors, power, and charging.
- [Battery specifications](https://info.mobilerobot.com/documentation/technical-reference/battery-specifications/) (<https://info.mobilerobot.com/documentation/technical-reference/battery-specifications/>) — chemistry, drain rates, runtime, and transport testing.
- [Interface specifications](https://info.mobilerobot.com/documentation/technical-reference/interface-specifications/) (<https://info.mobilerobot.com/documentation/technical-reference/interface-specifications/>) — operator controls, indicators, and integration interfaces.
- [J1600 technical specifications](https://info.mobilerobot.com/products/j1600/technical-specifications/) (<https://info.mobilerobot.com/products/j1600/technical-specifications/>) — the product-section specification page.