



The Mobile Robot Company

Knowledge Center — Product and Capabilities · 2026-08-04

<https://info.mobilerobot.com/support/faq/product-and-capabilities>

Product and Capabilities

Answers to the most common questions about what the J1600 is and [what it can do](https://info.mobilerobot.com/products/j1600/features-and-benefits/) (<https://info.mobilerobot.com/products/j1600/features-and-benefits/>). For the full picture, see the [J1600 overview](https://info.mobilerobot.com/products/j1600/overview/) (<https://info.mobilerobot.com/products/j1600/overview/>) and the [technical specifications](https://info.mobilerobot.com/products/j1600/technical-specifications/) (<https://info.mobilerobot.com/products/j1600/technical-specifications/>).

What is the J1600?

The J1600 is a compact, electric, dual-mode self-driving pallet jack for indoor, floor-to-floor pallet transport. You can operate it with a tiller like a conventional walk-behind electric pallet jack, or send it autonomously to saved locations. It is the first product of [The Mobile Robot Company ApS](https://info.mobilerobot.com/company/about/company-overview/) (<https://info.mobilerobot.com/company/about/company-overview/>), a Danish robotics company founded in November 2024 and [headquartered in Hvidovre, Denmark](https://info.mobilerobot.com/company/locations/headquarters/) (<https://info.mobilerobot.com/company/locations/headquarters/>). The J1600 is made in Denmark.

What does "dual mode" mean?

Dual mode combines two operating behaviors in one vehicle:

- **Manual mode** — a person controls the tiller and lift functions exactly like a conventional electric pallet jack, including nuanced pickup, handling up to 1.6 m, difficult approaches, and [sensitive or unstable loads](https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/) (<https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/>).
- **Automatic mode** — after the operator selects a saved destination and confirms the mode change, the vehicle [drives autonomously](https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/) (<https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/>), drops the pallet at floor level, and follows its configured return, park, or wait behavior.

See [Dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/) (<https://info.mobilerobot.com/products/j1600/dual-mode/>) for the full explanation.

How much can the J1600 carry?

The rated payload is 1,600 kg (approximately 3,500 lb).

How high can it lift?

In [manual mode](https://info.mobilerobot.com/documentation/user-guides/manual-operation/) (<https://info.mobilerobot.com/documentation/user-guides/manual-operation/>), the J1600 picks and drops pallets at heights up to 1,600 mm (63 in). Autonomous pallet delivery is at floor level. The 1.6 m lift is a manual capability — [the robot does not deliver at height in automatic mode](https://info.mobilerobot.com/support/troubleshooting/task-and-location-problems/) (<https://info.mobilerobot.com/support/troubleshooting/task-and-location-problems/>).

How fast does it drive?

[Top speed](https://info.mobilerobot.com/products/j1600/dimensions-and-performance/) (<https://info.mobilerobot.com/products/j1600/dimensions-and-performance/>) is 5.4 km/h (1.5 m/s / 3.4 mph).

How much operator time does it save?

[Up to 80% of the manual work and operator time spent on repetitive transport](https://info.mobilerobot.com/applications/results/productivity-improvements/) (<https://info.mobilerobot.com/applications/results/productivity-improvements/>). The claim applies to the repetitive travel portion of pallet transport, not to every warehouse process. The design intent is roughly 80% automation rather than 100%: the operator keeps judgment-heavy pickup and [exception handling](https://info.mobilerobot.com/applications/scenarios/handling-exceptions-and-irregular-loads/) (<https://info.mobilerobot.com/applications/scenarios/handling-exceptions-and-irregular-loads/>), and the robot [removes the repeated walking](https://info.mobilerobot.com/applications/results/reduction-in-manual-walking/) (<https://info.mobilerobot.com/applications/results/reduction-in-manual-walking/>). See [Human-in-the-loop automation](https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/) (<https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/>).

What does the robot do after it delivers a pallet?

You choose the post-delivery behavior when you create the task: return to the origin or operator, go to another saved point or to parking, or [stop and wait at the destination](https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/) (<https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/>). The most commonly used task is [manual pickup, autonomous delivery](https://info.mobilerobot.com/application) (<https://info.mobilerobot.com/application>

[s/scenarios/manual-pickup-and-autonomous-delivery/](https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/)), floor-level drop, and [return to origin \(https://info.mobilerobot.com/applications/scenarios/deliver-and-return/\)](https://info.mobilerobot.com/applications/scenarios/deliver-and-return/).

Do I need Wi-Fi or IT integration to use it?

No. [Wi-Fi is optional for basic use \(https://info.mobilerobot.com/documentation/installation/net-work-and-wi-fi-requirements/\)](https://info.mobilerobot.com/documentation/installation/net-work-and-wi-fi-requirements/), and no warehouse-management system, fleet manager, or [other IT integration \(https://info.mobilerobot.com/applications/results/lower-integration-complexity/\)](https://info.mobilerobot.com/applications/results/lower-integration-complexity/) is required. Advanced connectivity — [VDA 5050 \(https://info.mobilerobot.com/products/software/vda-5050/\)](https://info.mobilerobot.com/products/software/vda-5050/), a [REST API \(https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/\)](https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/), and fleet management — is available as an optional software upgrade when the application grows. See [Software and integrations \(https://info.mobilerobot.com/support/faq/software-and-integrations/\)](https://info.mobilerobot.com/support/faq/software-and-integrations/).

How long does it take to learn?

About 30 minutes for an operator who already uses an electric pallet jack. The tiller and manual behavior are designed to feel like a conventional electric pallet jack, and tasks are created on the touchscreen without code.

What controls does the operator have?

A [15-inch multi-touch screen \(https://info.mobilerobot.com/documentation/technical-reference/interface-specifications/\)](https://info.mobilerobot.com/documentation/technical-reference/interface-specifications/) for tasks and locations, a physical LED start/resume button for automatic execution, a [three-position key switch \(https://info.mobilerobot.com/safety-compliance/safety-functions/mode-selection/\)](https://info.mobilerobot.com/safety-compliance/safety-functions/mode-selection/) (power off, manual only, automatic), and the tiller itself. Grabbing or moving the tiller returns the vehicle to manual control immediately.

Who is the J1600 designed for?

The [primary segment \(https://info.mobilerobot.com/company/about/markets-we-serve/\)](https://info.mobilerobot.com/company/about/markets-we-serve/) is small and medium businesses running a single shift with roughly one to five pallet-jack operators — operations that cannot justify a large automation project. It also fits larger sites with [local work cells \(https://info.mobilerobot.com/applications/use-cases/local-work-cell-automation/\)](https://info.mobilerobot.com/applications/use-cases/local-work-cell-automation/) or flows that are too small or too changeable for a conventional

fleet project, and [brownfield facilities](https://info.mobilerobot.com/applications/use-cases/brownfield-automation/) (<https://info.mobilerobot.com/applications/use-cases/brownfield-automation/>) seeking incremental automation.

What kinds of work does it automate?

Indoor, floor-to-floor pallet flows: [goods receiving](https://info.mobilerobot.com/applications/industries/goods-receiving/) (<https://info.mobilerobot.com/applications/industries/goods-receiving/>), storage, production supply, [staging and buffer management](https://info.mobilerobot.com/applications/use-cases/buffer-and-staging-management/) (<https://info.mobilerobot.com/applications/use-cases/buffer-and-staging-management/>), [cross-docking](https://info.mobilerobot.com/applications/use-cases/cross-docking/) (<https://info.mobilerobot.com/applications/use-cases/cross-docking/>), [temporary storage](https://info.mobilerobot.com/applications/use-cases/temporary-storage/) (<https://info.mobilerobot.com/applications/use-cases/temporary-storage/>), and [shipping](https://info.mobilerobot.com/applications/industries/shipping-and-dispatch/) (<https://info.mobilerobot.com/applications/industries/shipping-and-dispatch/>). Pallet pickup is always manual; the robot automates the travel and the floor-level drop. See [Pallets and loads](https://info.mobilerobot.com/support/faq/pallets-and-loads/) (<https://info.mobilerobot.com/support/faq/pallets-and-loads/>) for what it can carry.

Has the J1600 won any awards?

Yes. The J1600 won the [IFOY AWARD 2026](https://info.mobilerobot.com/newsroom/awards/ifo-award-2026/) (<https://info.mobilerobot.com/newsroom/awards/ifo-award-2026/>) in the Industrial Truck of the Year category, announced on 26 June 2026 after the ceremony in Stuttgart. It competed against products from established industrial-truck manufacturers, passed the three-stage IFOY Audit, and received the [Best in Intralogistics Certificate](https://info.mobilerobot.com/newsroom/awards/best-in-intral-logistics/) (<https://info.mobilerobot.com/newsroom/awards/best-in-intral-logistics/>) on 16 April 2026. The Mobile Robot Company was also named to a [list of 100 robotics startups to watch](https://info.mobilerobot.com/newsroom/awards/startup-recognition/) (<https://info.mobilerobot.com/newsroom/awards/startup-recognition/>) in November 2025 and joined the [NVIDIA Inception](https://info.mobilerobot.com/company/collaborations/nvidia-inception/) (<https://info.mobilerobot.com/company/collaborations/nvidia-inception/>) program the same month.

Where can I see the full specifications?

The [J1600 technical specifications](https://info.mobilerobot.com/products/j1600/technical-specifications/) (<https://info.mobilerobot.com/products/j1600/technical-specifications/>) page lists dimensions, performance, battery, environment limits, and safety data.

PRELIMINARY SPECIFICATIONS

The January 2026 J1600 specifications are preliminary and subject to change.