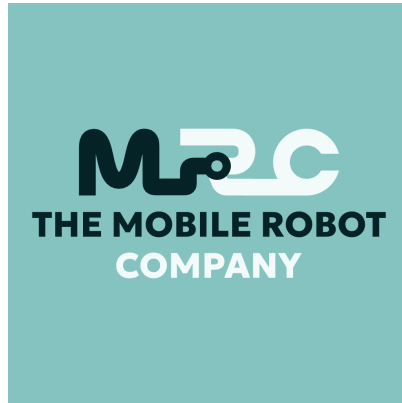




The Mobile Robot Company

Knowledge Center — Support · 2026-08-04

<https://info.mobilerobot.com/category/support>

Support

FAQs, troubleshooting, service plans, training, and how to reach support.



Frequently Asked Questions

10 pages



Troubleshooting

8 pages



Service and Warranty

8 pages



Training

3 pages



Contact Support

4 pages



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.

Pallets and Loads

Common questions about what the J1600 can pick up and transport. The short version: any forkable, open-base carrier within the size and weight limits below.

Which pallets does the J1600 support?

The J1600 requires an **open-base carrier with no bottom deck board** so its forks can enter. Supported carriers include:

- EPAL Euro Pallet, EPAL 3, and EPAL 6;
- all GMA (Grocery Manufacturers Association) pallets with an open base;
- any other forkable open-base carrier within the size limits.

What are the maximum load dimensions and weight?

Parameter	Limit
Maximum pallet/load length, including overhang	1,250 mm / 49 in
Maximum pallet/load width, including overhang	1,250 mm / 49 in
Maximum load height from floor	1,700 mm / 67 in
Maximum payload	1,600 kg / approximately 3,500 lb

The exact maximum envelope is 1,250 mm; some shorter overviews round it to 1.2 m. Use the exact figure when checking a load.

Can it move open cages, barrels, and non-standard carriers?

Yes. [Open cages, barrels, and carriers beyond Euro pallets](https://info.mobilerobot.com/applications/use-cases/open-cages-and-alternative-load-carriers/) (<https://info.mobilerobot.com/applications/use-cases/open-cages-and-alternative-load-carriers/>), are supported as long as the base is open and forkable and the carrier fits the size limits. Compatibility depends on

base geometry, size, stability, and operator judgment — there is no [blanket approval](https://info.mobilerobot.com/safety-compliance/safe-deployment/approved-loads-and-pallets/) (<https://info.mobilerobot.com/safety-compliance/safe-deployment/approved-loads-and-pallets/>) for every carrier or for hazardous materials.

What are the fork dimensions?

Parameter	Metric	Imperial
Fork length	1,150 mm	45 in
Fork width	180 mm	7 in
Fork thickness	60 mm	2.4 in
Fork outer distance	680 mm	27 in
Fork inner distance	320 mm	13 in
Fork height, lowest position	90 mm	3.5 in
Fork height, highest position	1,600 mm	63 in

How fast does it lift and lower?

Movement	Speed
Lifting, no load	0.10 m/s (0.33 ft/s)
Lifting, full load	0.08 m/s (0.26 ft/s)
Lowering, no load	0.08 m/s (0.26 ft/s)
Lowering, full load	0.12 m/s (0.39 ft/s)

Can it handle unstable or sensitive loads?

Yes — that is a core reason for dual mode. The operator uses manual control and judgment for pickup and close maneuvering of [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/>) (barrels are a typical

example), then hands the long, repetitive transport over to autonomous mode. Pallet detection and height limits stay under the operator's control during manual handling. See [Dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/) (https://info.mobilerobot.com/products/j1600/dual-mode/).

Does the robot pick up pallets by itself?

No. Pallet pickup is always manual. The operator picks the pallet, creates or selects a task on the touchscreen, and confirms autonomous mode. The robot then drives, avoids obstacles, and drops the pallet at floor level.

Can it deliver a pallet onto a rack or at height?

No. Autonomous pallet delivery is at floor level. Placing a pallet at height — up to 1,600 mm — is a [manual-mode capability](https://info.mobilerobot.com/documentation/user-guides/manual-operation/) (https://info.mobilerobot.com/documentation/user-guides/manual-operation/). See [Product and capabilities](https://info.mobilerobot.com/support/faq/product-and-capabilities/) (https://info.mobilerobot.com/support/faq/product-and-capabilities/).

Does the robot know whether it is carrying a load?

Yes. A load-detection sensor is part of the [safety architecture](https://info.mobilerobot.com/safety-compliance/safety-overview/safety-architecture/) (https://info.mobilerobot.com/safety-compliance/safety-overview/safety-architecture/), and its [load-detection safety function](https://info.mobilerobot.com/safety-compliance/safety-functions/load-detection/) (https://info.mobilerobot.com/safety-compliance/safety-functions/load-detection/) is assigned Performance Level b. See [Safety](https://info.mobilerobot.com/support/faq/safety/) (https://info.mobilerobot.com/support/faq/safety/).

Navigation and Mapping

Common questions about how the J1600 finds its way, how you teach it locations, and where it can drive.

How does the J1600 navigate?

With **3D LiDAR SLAM** (<https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/>) (simultaneous localization and mapping) processed by an industrial NVIDIA Jetson AI computer. The robot builds and continuously updates a three-dimensional map of the facility while an operator drives it, then localizes itself in that map and plans routes to saved destinations. It scans environmental structures at heights reaching up to 70 m above the vehicle, and its 3D mapping is designed for greater precision and reliability than traditional 2D navigation in complex or changing environments.

Do I need to install tracks, wires, reflectors, or markers?

No. The J1600 needs no fixed tracks, wires, reflectors, or building modifications. It maps the facility as it is.

How do I create the map?

[Drive the robot manually through the facility](https://info.mobilerobot.com/documentation/getting-started/creating-the-first-map/) (<https://info.mobilerobot.com/documentation/getting-started/creating-the-first-map/>) with the tiller. It learns and updates its understanding of the environment continuously while you drive — there is no separate mapping procedure to run.

How do I add a destination?

Drive manually to the desired [floor-drop point](https://info.mobilerobot.com/documentation/installation/mapping-and-drop-point-setup/) (<https://info.mobilerobot.com/documentation/installation/mapping-and-drop-point-setup/>), tap **Save location** on the touchscreen, and

name it. Repeat for every destination you need. Operators add locations themselves; no automation expert or IT involvement is needed.

How many locations can I save?

There is no software limit on the number of [saved locations](https://info.mobilerobot.com/documentation/user-guides/location-management/) (<https://info.mobilerobot.com/documentation/user-guides/location-management/>). Practical limits come from the available warehouse space.

Do I have to teach every route?

No. Locations can be recombined freely. The robot navigates from wherever it is to any saved point — you do not demonstrate every possible origin-to-destination combination. This makes [multi-point flows](https://info.mobilerobot.com/applications/use-cases/multi-point-pallet-transport/) (<https://info.mobilerobot.com/applications/use-cases/multi-point-pallet-transport/>), such as [cross-docking](https://info.mobilerobot.com/applications/use-cases/cross-docking/) (<https://info.mobilerobot.com/applications/use-cases/cross-docking/>) practical. 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 carries on those routes.

How does it handle obstacles and people?

The J1600 detects and avoids obstacles in dynamic environments and [routes around people and objects](https://info.mobilerobot.com/applications/scenarios/operation-in-crowded-environments/) (<https://info.mobilerobot.com/applications/scenarios/operation-in-crowded-environments/>) using its continuously updated 3D map. Personnel protection is handled by a [separate, certified 2D safety stack](https://info.mobilerobot.com/safety-compliance/safety-overview/navigation-sensors-vs-safety-sensors/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/navigation-sensors-vs-safety-sensors/>) — two 2D safety LiDAR scanners and an independent safety controller — distinct from the navigation sensors. See [Safety](https://info.mobilerobot.com/support/faq/safety/) (<https://info.mobilerobot.com/support/faq/safety/>), and [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/>).

Can I control where it prefers to drive?

Yes. Preferred travel zones can be defined for safer routing through production areas.

Does it work in brownfield sites and changing layouts?

Yes. The J1600 is designed for [brownfield facilities](https://info.mobilerobot.com/applications/use-cases/brownfield-automation/) and changing layouts: 3D mapping handles dynamic environments, the robot drives around obstacles in its way, and operators [re-teach or add locations](https://info.mobilerobot.com/documentation/concepts/teach-and-repeat/) in minutes when the [layout changes](https://info.mobilerobot.com/applications/scenarios/dynamic-route-changes/).

What floor and environment conditions does it need?

Parameter	Requirement
Gradeability, automatic mode	0° / 0% — level floors only
Gradeability, manual mode	2.86° / 5% without load; 1.72° / 3% at full load
Maximum traversable bump	25 mm / 1 in
Maximum traversable gap	20 mm / 0.8 in
Floor flatness/levelness	TR34 FM3 (FF 25 / FL 20)
Operating temperature	5–40 °C / 41–104 °F
Relative humidity	20–80%, non-condensing
Ingress protection	IP21 — indoor use

Autonomous driving is an [indoor, level-floor application](https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/). Steep dock plates and slopes remain manual tasks.

What are the navigation sensors, exactly?

A 3D LiDAR and an RGB AI camera feed the navigation and control stack, which runs on the NVIDIA Jetson industrial PC. No values are published for exact sensor geometry, range, accuracy, minimum aisle width, localization tolerance, or obstacle

classes. See the [technical specifications](https://info.mobilerobot.com/products/j1600/technical-specifications/) (<https://info.mobilerobot.com/products/j1600/technical-specifications/>) for the full hardware list.

Safety

Common questions about how the J1600 keeps people safe while driving autonomously. For the complete architecture, 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/>).

Is the J1600 safe to operate around people?

The J1600 uses a layered safety design: [navigation and obstacle avoidance](https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) (<https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/>), certified safety sensing, an independent safety controller, certified actuation, [human confirmation before autonomous work](https://info.mobilerobot.com/safety-compliance/safety-overview/manual-and-autonomous-mode-safety/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/manual-and-autonomous-mode-safety/>), and physical override. A full 360-degree protective field supports both forward and reverse autonomous travel. The built-in safety functions improve predictability and may [reduce workplace accidents](https://info.mobilerobot.com/applications/results/safety-improvements/) (<https://info.mobilerobot.com/applications/results/safety-improvements/>), compared with manual pallet handling.

What safety components does it have?

- an independent safety controller;
- two 2D safety LiDAR scanners covering front and rear;
- three emergency-stop buttons;
- a belly button for stop and reverse;
- a [load-detection sensor](https://info.mobilerobot.com/safety-compliance/safety-functions/load-detection/) (<https://info.mobilerobot.com/safety-compliance/safety-functions/load-detection/>);
- [tiller-position switches](https://info.mobilerobot.com/safety-compliance/safety-functions/tiller-detection/) (<https://info.mobilerobot.com/safety-compliance/safety-functions/tiller-detection/>), for emergency stop and for manual control;
- [safety-certified driving-speed and driving-direction encoders](https://info.mobilerobot.com/safety-compliance/safety-functions/speed-monitoring/) (<https://info.mobilerobot.com/safety-compliance/safety-functions/speed-monitoring/>);
- two safety-certified motor controllers.

The 2D safety LiDARs are [separate from the 3D navigation LiDAR](https://info.mobilerobot.com/safety-compliance/safety-overview/navigation-sensors-vs-safety-sensors/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/navigation-sensors-vs-safety-sensors/>): navigation maps and avoids objects, while the certified 2D safety stack provides personnel

protection. See [Navigation and mapping](https://info.mobilerobot.com/support/faq/navigation-and-mapping/) (https://info.mobilerobot.com/support/faq/navigation-and-mapping/).

How does the protective field work?

The protective field surrounds the vehicle in 360 degrees and [changes with speed](https://info.mobilerobot.com/safety-compliance/safety-functions/safety-field-adjustment/) (https://info.mobilerobot.com/safety-compliance/safety-functions/safety-field-adjustment/) — it expands as travel speed increases. Blue floor-light strips display the current protected area while the robot works autonomously; white light indicates manual mode. [Person detection](https://info.mobilerobot.com/safety-compliance/safety-functions/person-detection/) (https://info.mobilerobot.com/safety-compliance/safety-functions/person-detection/) in the safety field triggers the assigned safety functions, including [braking](https://info.mobilerobot.com/safety-compliance/safety-functions/braking/) (https://info.mobilerobot.com/safety-compliance/safety-functions/braking/).

What happens before the robot starts driving by itself?

The operator must [confirm entry into automatic mode](https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/) (https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/) with the physical start/resume button, and the robot instructs the operator to step away before it moves. Autonomous work never starts without a deliberate human confirmation.

How do I take over or stop the robot?

Grab or move the tiller — the vehicle returns to manual control immediately. You can also use any of the [three emergency-stop buttons](https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/) (https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/), the belly button (stop and reverse), or the [key switch](https://info.mobilerobot.com/safety-compliance/safety-functions/mode-selection/) (https://info.mobilerobot.com/safety-compliance/safety-functions/mode-selection/), which selects power off, manual only, or automatic mode.

What Performance Levels do the safety functions have?

The preliminary datasheet assigns these [Performance Levels \(PL\)](https://info.mobilerobot.com/safety-compliance/safety-functions/performance-levels/) (https://info.mobilerobot.com/safety-compliance/safety-functions/performance-levels/) per [EN ISO 13849-1](https://info.mobilerobot.com/safety-compliance/standards/iso-13849-1/) (https://info.mobilerobot.com/safety-compliance/standards/iso-13849-1/):

Safety function	Performance Level
Braking system	PL d
Speed monitoring and control	PL c
Safety-field size adjustment	PL d
Load detection	PL b
Charging-current relay	PL b
Emergency-stop button	PL d
Person detection in safety field	PL d
Automatic/manual mode selection	PL c
Tiller-position detection	PL c

These are levels of individual functions, not a statement that every subsystem shares the same PL.

Which standards and directives does the J1600 comply with?

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/>). The preliminary [compliance list](https://info.mobilerobot.com/safety-compliance/certificates/compliance-statements/) (<https://info.mobilerobot.com/safety-compliance/certificates/compliance-statements/>) includes:

- [Directive 2006/42/EC \(Machinery\)](https://info.mobilerobot.com/safety-compliance/standards/eu-machinery-requirements/) (<https://info.mobilerobot.com/safety-compliance/standards/eu-machinery-requirements/>), [2014/30/EU \(EMC\)](https://info.mobilerobot.com/safety-compliance/standards/emc-red-rohs-and-battery-regulations/), [2014/53/EU \(Radio Equipment\)](https://info.mobilerobot.com/safety-compliance/standards/emc-red-rohs-and-battery-regulations/), [2011/65/EU \(RoHS\)](https://info.mobilerobot.com/safety-compliance/standards/emc-red-rohs-and-battery-regulations/), and [Regulation \(EU\) 2023/1542 \(Batteries\)](https://info.mobilerobot.com/safety-compliance/standards/emc-red-rohs-and-battery-regulations/) (<https://info.mobilerobot.com/safety-compliance/standards/emc-red-rohs-and-battery-regulations/>);
- [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/>), [EN ISO 13849-1:2023](https://info.mobilerobot.com/safety-compliance/standards/iso-12100/), [EN ISO 12100:2010](https://info.mobilerobot.com/safety-compliance/standards/iso-12100/) (<https://info.mobilerobot.com/safety-compliance/standards/iso-12100/>), and [EN ISO 3691-1:2015+A1:2020](https://info.mobilerobot.com/safety-compliance/standards/iso-3691-1/) (<https://info.mobilerobot.com/safety-compliance/standards/iso-3691-1/>);
- [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/>), and [ANSI/ITSDF B56.1-2020](https://info.mobilerobot.com/safety-compliance/standards/ansi-itsdf-b56-1/) (<https://info.mobilerobot.com/safety-compliance/standards/ansi-itsdf-b56-1/>);

- [UN 38.3 battery transport testing](https://info.mobilerobot.com/safety-compliance/certificates/battery-un-38-3-documentation/) (<https://info.mobilerobot.com/safety-compliance/certificates/battery-un-38-3-documentation/>).

This is summarized as compliance with EU and US safety requirements, especially ISO 3691-4 and ANSI/ITSDF B56.5. No [certificates](https://info.mobilerobot.com/safety-compliance/certificates/) (<https://info.mobilerobot.com/safety-compliance/certificates/>), test reports, declaration numbers, notified-body information, or country-specific approvals are published; use current product documentation for deployment decisions.

Can it reverse safely in autonomous mode?

Yes. The 360-degree protective field supports certified safe reversing without specially marked target zones.

Is human supervision the only safety mechanism?

No. Human takeover complements the [certified safety architecture](https://info.mobilerobot.com/safety-compliance/safety-overview/safety-architecture/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/safety-architecture/>) — the independent controller, safety LiDARs, emergency stops, and speed-dependent protective field operate regardless of the operator. 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/>) for how the human role and the safety system fit together.

Charging and Battery

Common questions about powering the J1600 through a working day.

What battery does the J1600 use?

A [24 V, 200 Ah lithium iron phosphate \(LiFePO4\) battery](https://info.mobilerobot.com/documentation/technical-reference/battery-specifications/) (<https://info.mobilerobot.com/documentation/technical-reference/battery-specifications/>). The [drive motor](https://info.mobilerobot.com/documentation/technical-reference/electrical-specifications/) (<https://info.mobilerobot.com/documentation/technical-reference/electrical-specifications/>) is a 1.5 kW AC motor and the lift motor is rated 2.2 kW. The battery is tested per [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/>) (UN Manual of Tests and Criteria, subsection 38.3) for transport.

How long does it run on a charge?

Runtime exceeds eight hours in a typical duty cycle. The measured drain rates are:

Condition	Battery drain
Driving fully loaded	approximately 13% per hour
Driving without load	approximately 12% per hour
Standby	approximately 2% per hour

These rates imply roughly 7.7 hours of continuous fully loaded driving or 8.3 hours unloaded, before allowing for standby, lifting, duty cycle, battery reserve, and operating conditions. Treat those calculated figures as indicative, not guaranteed runtimes.

How fast does it charge?

Approximately 47 percentage points of charge per hour.

What charging options are there?

Two:

- **Manual charging** (<https://info.mobilerobot.com/documentation/user-guides/charging/>) — plug in the charger during a break or when the machine is idle, exactly as you would with a conventional electric pallet jack.
- **Automatic charging** (<https://info.mobilerobot.com/applications/scenarios/automatic-charging/>) — with the optional automatic charger, the robot drives to the station, positions itself at the charger, and a charging interface extends to the vehicle's charging plates. This enables opportunity charging whenever the robot is not busy.

Automatic charging is an advanced automation capability. When purchased, its setup is part of Day 1 of the [installation and commissioning package](https://info.mobilerobot.com/support/faq/installation/) (<https://info.mobilerobot.com/support/faq/installation/>).

What do the chargers cost?

2026 end-user list prices:

Item	List price
Manual charger	€3,600
Automatic charger	€8,400

Is a charger included with the robot?

A charger is not included with the J1600 (from €65,000) — [choose a manual or automatic charger](https://info.mobilerobot.com/documentation/installation/charger-installation/) (<https://info.mobilerobot.com/documentation/installation/charger-installation/>) when configuring your order. See [Pricing and purchasing](https://info.mobilerobot.com/support/faq/pricing-and-purchasing/) (<https://info.mobilerobot.com/support/faq/pricing-and-purchasing/>) for typical configurations.

Can the robot work a full single shift?

That is the design target: the economics and runtime are aimed at single-shift operations of eight hours per day, five days per week. With opportunity charging via

the [automatic charger](https://info.mobilerobot.com/products/chargers-and-accessories/automatic-charger/) (<https://info.mobilerobot.com/products/chargers-and-accessories/automatic-charger/>), the robot tops up whenever it is idle. See [Product and capabilities](https://info.mobilerobot.com/support/faq/product-and-capabilities/) (<https://info.mobilerobot.com/support/faq/product-and-capabilities/>) for the target operation profile.

Software and Integrations

Common questions about the J1600's software, connectivity, and [integration options](https://info.mobilerobot.com/documentation/technical-integration/integration-overview/) (<https://info.mobilerobot.com/documentation/technical-integration/integration-overview/>).

What software does the J1600 come with?

One hardware platform supports [two software versions](https://info.mobilerobot.com/products/software/software-comparison/) (<https://info.mobilerobot.com/products/software/software-comparison/>):

- **Standard software** (<https://info.mobilerobot.com/products/software/standard-software/>) — reduced to essential functions for maximum ease of use. It is built around configuration-free [Teach and Repeat](https://info.mobilerobot.com/documentation/concepts/teach-and-repeat/) (<https://info.mobilerobot.com/documentation/concepts/teach-and-repeat/>), designed to be "consumer-level easy" for an existing pallet-jack operator, and is ideal for a single-unit deployment [without systems integration](https://info.mobilerobot.com/applications/results/lower-integration-complexity/) (<https://info.mobilerobot.com/applications/results/lower-integration-complexity/>). Tasks are launched from the touchscreen using saved locations, and [Wi-Fi is optional](https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/) (<https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/>).
- **Advanced software** (<https://info.mobilerobot.com/products/software/advanced-software/>) — adds VDA 5050 interoperability, a REST API, Fleet Manager, advanced mission planning, and advanced integration with other software and equipment. It is priced as a separate upgrade.

What is Teach and Repeat?

The operator demonstrates the work instead of programming it: drive to a point, [tap Save location](https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/) (<https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/>), and the robot can then travel there autonomously on demand. No code, no configuration project. See [Navigation and mapping](https://info.mobilerobot.com/support/faq/navigation-and-mapping/) (<https://info.mobilerobot.com/support/faq/navigation-and-mapping/>) for how locations and mapping work, and the [glossary](https://info.mobilerobot.com/documentation/concepts/glossary/) (<https://info.mobilerobot.com/documentation/concepts/glossary/>) for term definitions.

Does the J1600 support VDA 5050?

Yes — full [VDA 5050](https://info.mobilerobot.com/products/software/vda-5050/) support is included in the Advanced software. VDA 5050 is the interoperability interface that lets mobile robots from different vendors work together in the same space under a compatible fleet layer. The company works with established VDA 5050 fleet-management providers. No exact VDA 5050 version, API schema, authentication model, supported fleet-manager list, or integration certification is published.

Is there an API?

Yes. The Advanced software includes a [REST API](https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/) for integration with other systems and equipment.

Do I need a WMS or fleet manager to run the robot?

No. Basic use requires no warehouse-management system, fleet manager, or IT integration of any kind, and Wi-Fi is optional. [Integration is a choice you make when the application grows](https://info.mobilerobot.com/documentation/technical-integration/external-system-integration/), not a prerequisite.

What is Fleet Manager?

[Per-robot software for orchestrated multi-robot deployments](https://info.mobilerobot.com/products/software/fleet-manager/), available with the Advanced software. It is priced per robot.

What automation functions come at each level?

Level	Functions
Basic automation	On-screen task start; saved locations; autonomous floor-level drop; self-drive to saved locations; return-to-me; go-to-parking
Advanced automation	Come-to-me; automatic charging; VDA 5050 fleet management; API integrations

Come to me (<https://info.mobilerobot.com/applications/scenarios/come-to-me/>) calls the robot to your location using a mobile app or web interface. Automatic charging is covered in [Charging and battery](https://info.mobilerobot.com/support/faq/charging-and-battery/) (<https://info.mobilerobot.com/support/faq/charging-and-battery/>).

Can I upgrade from Standard to Advanced later?

Yes, but plan ahead: the upgrade is easiest to install at the factory when the robot is ordered. A partner can perform the upgrade later; the customer cannot perform it.

What does the software cost?

2026 end-user list prices:

Software item	List price
Upgrade to Advanced software	€14,500
Fleet Manager, per robot	€6,500

See [Pricing and purchasing](https://info.mobilerobot.com/support/faq/pricing-and-purchasing/) (<https://info.mobilerobot.com/support/faq/pricing-and-purchasing/>) for the complete price list.

Can robots from other brands share the space?

Yes, through [VDA 5050](https://info.mobilerobot.com/documentation/technical-integration/vda-5050-documentation/) (<https://info.mobilerobot.com/documentation/technical-integration/vda-5050-documentation/>): the interface allows robots from different vendors to coexist under a compatible fleet-management layer.



Installation

Common questions about [getting a J1600 running](https://info.mobilerobot.com/documentation/getting-started/j1600-quick-start-guide/) in your facility.

Does the J1600 really work out of the box?

Yes. The standard J1600 is [ready to use on delivery](https://info.mobilerobot.com/documentation/getting-started/delivery-and-unpacking/): no building modifications, tracks, wires, or reflectors; [Wi-Fi optional](https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/); no mandatory [WMS, fleet-manager, or IT integration](https://info.mobilerobot.com/applications/results/lower-integration-complexity/). An on-device or online tutorial guides the [first-time setup](https://info.mobilerobot.com/documentation/getting-started/first-time-setup/). [Typical setup takes hours or one day](https://info.mobilerobot.com/applications/results/faster-deployment/), [depending on scope](https://info.mobilerobot.com/applications/planning/deployment-scope-examples/).

What are the basic setup steps?

1. Power on the J1600 and follow the on-screen tutorial.
2. [Drive manually through the facility](https://info.mobilerobot.com/documentation/getting-started/creating-the-first-map/) with the tiller — the robot learns the environment continuously while you drive.
3. Drive to each desired autonomous [floor-drop point](https://info.mobilerobot.com/documentation/installation/mapping-and-drop-point-setup/).
4. **Tap Save location, name the point** [\(https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/\)](https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/), and repeat for all destinations.

There is no software limit on saved locations. See [Navigation and mapping](https://info.mobilerobot.com/support/faq/navigation-and-mapping/).

How much training do operators need?

[About 30 minutes](https://info.mobilerobot.com/documentation/getting-started/operator-training/) for an operator who already uses an electric pallet jack. The manual behavior is

deliberately familiar, and [task creation](https://info.mobilerobot.com/documentation/user-guides/task-management/) (<https://info.mobilerobot.com/documentation/user-guides/task-management/>) is no-code touchscreen work.

What does my facility need to provide?

- [indoor operation](https://info.mobilerobot.com/documentation/installation/operating-environment-requirements/) (<https://info.mobilerobot.com/documentation/installation/operating-environment-requirements/>), 5–40 °C (41–104 °F), 20–80% relative humidity, non-condensing;
- [level floors for autonomous driving](https://info.mobilerobot.com/applications/planning/ro-ute-and-floor-suitability/) (<https://info.mobilerobot.com/applications/planning/ro-ute-and-floor-suitability/>) (0% automatic gradeability), flatness to TR34 FM3 (FF 25 / FL 20);
- bumps no higher than 25 mm and gaps no wider than 20 mm on autonomous routes;
- [power for the manual or automatic charger](https://info.mobilerobot.com/documentation/installation/charger-installation/) (<https://info.mobilerobot.com/documentation/installation/charger-installation/>) — see [Charging and battery](https://info.mobilerobot.com/support/faq/charging-and-battery/) (<https://info.mobilerobot.com/support/faq/charging-and-battery/>).

The robot's ingress protection is IP21.

Is there a formal installation service?

Yes — an optional five-day [installation and commissioning package](https://info.mobilerobot.com/products/buying-and-deployment/installation-and-commissioning/) (<https://info.mobilerobot.com/products/buying-and-deployment/installation-and-commissioning/>) at €10,000 end-user list price, designed to reduce go-live risk:

Phase	Content
Pre-installation	Feasibility check for all selected tasks and loads; risk assessment; project plan
Day 1	Unboxing; Wi-Fi connection if desired; automatic-charging setup if purchased; creation of up to 25 drop points; task validation; safety validation
Day 2	Group training for all operators; individual hands-on practice for up to six operators
Days 3–4	Performance monitoring; on-site troubleshooting and support; additional operator training as needed
Day 5	Acceptance test; handover

Add-ons include integration with other software or equipment, additional validated drop points, and [Fleet Management System setup](https://info.mobilerobot.com/documentation/technical-integration/fleet-manager-guide/) (https://info.mobilerobot.com/documentation/technical-integration/fleet-manager-guide/).

Do I need the commissioning package to use the robot?

No. The package is an optional deployment service — it should not be confused with the machine's basic out-of-box usability. Many deployments need only the basic setup steps above.

Can I try the J1600 before installing it permanently?

Yes. A [two-week paid trial](https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/) (https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/) (€4,000, including setup and support) is available, you can test at the company's [Copenhagen demo and test area](https://info.mobilerobot.com/company/locations/test-and-demonstration-facility/) (https://info.mobilerobot.com/company/locations/test-and-demonstration-facility/), or a [proof of concept](https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/) (https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/) can be run at your own plant. See [Pricing and purchasing](https://info.mobilerobot.com/support/faq/pricing-and-purchasing/) (https://info.mobilerobot.com/support/faq/pricing-and-purchasing/) and [Partners and availability](https://info.mobilerobot.com/support/faq/partners-and-availability/) (https://info.mobilerobot.com/support/faq/partners-and-availability/).

Who performs the installation?

Local partners (<https://info.mobilerobot.com/products/buying-and-deployment/find-a-local-partner/>) deliver demonstrations, trials, deployment, and service, with the company supplying training, parts, software, and technical support. See Partners and availability (<https://info.mobilerobot.com/support/faq/partners-and-availability/>).

Pricing and Purchasing

Common questions about [what the J1600 costs](https://info.mobilerobot.com/products/j1600/pricing-and-roi/) (<https://info.mobilerobot.com/products/j1600/pricing-and-roi/>), and how to buy one. All prices are 2026 end-user list prices in euros.

What does the J1600 cost?

The J1600 self-driving pallet jack starts at **€65,000**.

What is the full price list?

Item	End-user list price
J1600 self-driving pallet jack	€65,000
Two-week paid trial, including setup and support	€4,000
Installation and commissioning	€10,000
Manual charger	€3,600
Automatic charger	€8,400
Advanced software upgrade	€14,500
Fleet Manager, per robot	€6,500
Basic Care, per robot per year	€4,900
Full Care, per robot per year	€13,000
On-site support, per day plus travel	€2,400

Prices are time-sensitive; confirm current figures with the company or a [local partner](https://info.mobilerobot.com/products/buying-and-deployment/find-a-local-partner/) (<https://info.mobilerobot.com/products/buying-and-deployment/find-a-local-partner/>).

What does a typical configuration cost?

Around or below €80,000. Two reference configurations at list price:

- J1600 + manual charger + [installation and commissioning](https://info.mobilerobot.com/products/buying-and-deployment/installation-and-commissioning/): **€78,600**;
- J1600 + automatic charger + installation and commissioning: **€83,400**.

A charger is not included with the base robot — see [Charging and battery](https://info.mobilerobot.com/support/faq/charging-and-battery/).

Can I try it before buying?

Yes, three ways:

- a hands-on **demo** (<https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/>) (30–60 minutes) at a partner experience center or your site;
- a **two-week paid trial** (<https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/>) for €4,000 including setup and support, with free return at any time, no questions asked;
- a **proof of concept** (<https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/>) at the [Copenhagen demo area](https://info.mobilerobot.com/company/locations/test-and-demonstration-facility/) or at your own plant.

See [Partners and availability](https://info.mobilerobot.com/support/faq/partners-and-availability/).

How do I buy one?

List prices are public, and you can request or book demos, trials, and [purchases](https://info.mobilerobot.com/products/buying-and-deployment/request-a-quote/) through www.mobilerobot.com. The company **does not sell robots directly to end users** — inquiries are routed to the distributor, integrator, or service partner covering your area, and at purchase you choose an after-sales package. See [Service and warranty](https://info.mobilerobot.com/support/faq/service-and-warranty/).

What is the return on investment?

The J1600 saves up to 80% of the manual work and operator time (<https://info.mobilerobot.com/applications/results/productivity-improvements/>) on repetitive transport — not 80% of every process. The economics are designed to work for a single-shift SME operating eight hours per day, five days per week. The €65,000 entry price contrasts with full automation projects, which can reach approximately €1 million once WMS-to-fleet-manager integration (<https://info.mobilerobot.com/applications/results/lower-integration-complexity/>) is included. A complete ROI model (wage assumptions, utilization, maintenance, financing, payback period) is not available — build the business case on your own site figures.

What benefits count beyond labor savings?

Non-labor benefits (<https://info.mobilerobot.com/products/j1600/features-and-benefits/>) include fewer workplace accidents, injuries (<https://info.mobilerobot.com/applications/results/safety-improvements/>), and product damage; higher employee satisfaction from removing repetitive walking (<https://info.mobilerobot.com/applications/results/reduction-in-manual-walking/>); better inventory tracking and control in an automated process; steadier material flow and throughput; more productive use of skilled labor; easier response to labor shortages (<https://info.mobilerobot.com/applications/results/labor-reallocation/>); and lower implementation and change risk than rigid full automation.

How does it compare economically with the alternatives?

Model	Setup	Flexibility	Labor saving
Manual pallet jack	None	Full manual flexibility	None
J1600 dual mode	Hours	Manual control plus saved autonomous delivery	Up to 80% of operator time on target travel
Fully automated system	Weeks or a longer project	Preprogrammed, expert-configured	Up to 100% of task labor, if fully automated

See [Dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/) (https://info.mobilerobot.com/products/j1600/dual-mode/) for why the product targets 80% automation rather than 100%.

Service and Warranty

Common questions about supporting a J1600 after purchase.

What support plans are available?

Three standard packages, chosen at purchase. On-site service is separate in all three.

Free Plan

- no fixed annual payment;
- service and parts purchased as needed at list price;
- first-year warranty;
- first-year software upgrades;
- online self-help portal.

Basic Care Plan — €4,900 per robot per year

- software upgrades while the plan is active;
- unlimited remote support;
- first-year warranty included;
- 10% discount on list prices for parts.

Full Care Plan — €13,000 per robot per year

- extended warranty while the plan is active;
- software upgrades;
- free replacement of parts worn or broken in normal use;
- 10% discount on replacement for accidental damage or misuse;
- free loan robot when a repair lasts more than two business days;
- unlimited priority remote support.

Is an after-sales agreement mandatory?

No. The agreement is optional — the Free Plan carries no annual payment, and service and parts can be bought as needed.

What warranty does the J1600 come with?

The first year of warranty is included in every plan, including the Free Plan. The Full Care Plan extends the warranty for as long as the plan is active.

How do I get help with a technical issue?

Directly from the machine: open the **Help/Support** menu on the touchscreen and scan the QR code to send a technical request straight to support. The support portal also accepts tickets and device-log uploads, and remote support is available directly from the company. Under Basic Care and Full Care, remote support is unlimited.

Who services the robot locally?

[Your local partner](https://info.mobilerobot.com/support/contact/find-a-service-partner/) (<https://info.mobilerobot.com/support/contact/find-a-service-partner/>). Partners employ [field-service technicians with current product training](https://info.mobilerobot.com/support/training/technician-training/) (<https://info.mobilerobot.com/support/training/technician-training/>), deliver installation and on-site service, and can see and create support tickets for their customers. The company supplies parts, software, and technical support behind them. See [Partners and availability](https://info.mobilerobot.com/support/faq/partners-and-availability/) (<https://info.mobilerobot.com/support/faq/partners-and-availability/>).

What does on-site support cost?

€2,400 per day plus travel, at 2026 end-user list price. See the full price list in [Pricing and purchasing](https://info.mobilerobot.com/support/faq/pricing-and-purchasing/) (<https://info.mobilerobot.com/support/faq/pricing-and-purchasing/>).

What happens if my robot needs a long repair?

Under the Full Care Plan, you receive a free loan robot when a repair lasts more than two business days.

Are software upgrades included?

First-year [software upgrades](https://info.mobilerobot.com/documentation/service-maintenance/software-updates/) (<https://info.mobilerobot.com/documentation/service-maintenance/software-updates/>) are included in every plan. Basic Care and Full Care include software upgrades for as long as the plan is active. The upgrade from Standard to [Advanced software](https://info.mobilerobot.com/products/software/advanced-software/) (<https://info.mobilerobot.com/products/software/advanced-software/>) is a separate purchase — see [Software and integrations](https://info.mobilerobot.com/support/faq/software-and-integrations/) (<https://info.mobilerobot.com/support/faq/software-and-integrations/>).

Partners and Availability

Common questions about where you can get the J1600 and how the [partner channel works](https://info.mobilerobot.com/partners/program/program-overview/) (<https://info.mobilerobot.com/partners/program/program-overview/>).

Is the J1600 available in my country?

The J1600 is [available worldwide](https://info.mobilerobot.com/partners/become-a-partner/country-availability/) (<https://info.mobilerobot.com/partners/become-a-partner/country-availability/>), including in the United States, Canada, Australia, and China. By June 2026 the company had distributor partnerships in eight countries and was expanding the network. Confirm availability, prices, taxes, currencies, delivery times, and certification details for your market with the company or a [local partner](https://info.mobilerobot.com/products/buying-and-deployment/find-a-local-partner/) (<https://info.mobilerobot.com/products/buying-and-deployment/find-a-local-partner/>).

Can I buy directly from The Mobile Robot Company?

No. List prices are public and you can request demos, trials, and [purchases](https://info.mobilerobot.com/products/buying-and-deployment/request-a-quote/) (<https://info.mobilerobot.com/products/buying-and-deployment/request-a-quote/>) through www.mobilerobot.com (<https://www.mobilerobot.com>), but the company [does not sell robots directly to end users](https://info.mobilerobot.com/company/about/business-model/) (<https://info.mobilerobot.com/company/about/business-model/>). Inquiries are routed to a distributor, integrator, or service partner, who owns the local relationship. See [Pricing and purchasing](https://info.mobilerobot.com/support/faq/pricing-and-purchasing/) (<https://info.mobilerobot.com/support/faq/pricing-and-purchasing/>).

What do partners do?

Partners deliver local demonstrations, trials, sales, installation, service, and ongoing customer support. The company supplies robots, spare parts, software, training, technical support, marketing materials, and leads. Partners employ [field-service technicians with current product training](https://info.mobilerobot.com/support/training/technician-training/) (<https://info.mobilerobot.com/support/training/technician-training/>) and appoint an internal product champion as the main expert contact.

What is an experience center?

A partner-maintained showroom with a dedicated robot, pallets, and chargers, where customers get [hands-on demonstrations](https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/) (<https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/>). A standard demo takes 30–60 minutes; a first-time visitor can typically send the robot on an autonomous task within about 15 minutes.

What does the customer journey look like?

Four steps, of which the first two can be skipped (for example by repeat customers):

1. **Demo** — 30–60 minutes hands-on at an experience center or your site.
2. **Trial** — a [two-week paid trial](https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/) (<https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/>) with free return at any time, no questions asked.
3. **Purchase** — the robot and [selected options](https://info.mobilerobot.com/products/chargers-and-accessories/available-options/) (<https://info.mobilerobot.com/products/chargers-and-accessories/available-options/>).
4. **After-sales service** — an optional ongoing service agreement. See [Service and warranty](https://info.mobilerobot.com/support/faq/service-and-warranty/) (<https://info.mobilerobot.com/support/faq/service-and-warranty/>).

Can I test the robot before rolling it out?

Yes. Beyond demos and the two-week trial, you can test at the company's [Copenhagen demo and test area](https://info.mobilerobot.com/company/locations/test-and-demonstration-facility/) (<https://info.mobilerobot.com/company/locations/test-and-demonstration-facility/>) — used for validation under intentionally real-world conditions such as uneven flooring and water-filled loads — or run a [proof of concept](https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/) (<https://info.mobilerobot.com/applications/planning/proof-of-concept-planning/>) at your own plant with machines brought to your site. See [Installation](https://info.mobilerobot.com/support/faq/installation/) (<https://info.mobilerobot.com/support/faq/installation/>).

Who can become a partner?

Qualified [integrators, distributors, and service partners](https://info.mobilerobot.com/partners/program/partner-types/) (<https://info.mobilerobot.com/partners/program/partner-types/>) [can apply by country](https://info.mobilerobot.com/partners/program/application-process/) (<https://info.mobilerobot.com/partners/program/application-process/>). The program looks for [organizations whose primary business naturally complements the robots](https://info.mobilerobot.com/partners/become-a-partner/who-we-are-looking-for/) (<https://info.mobilerobot.com/partners/become-a-partner/who-we-are-looking-for/>), such as manual-fork-truck or automated-material-handling businesses. Partners are expected to maintain an experience center, keep product in

stock, offer the full range of products and services including paid trials and after-sales contracts, and participate in recurring joint business planning.

What does the partnership offer commercially?

Partners earn [product margin plus software and service revenue](https://info.mobilerobot.com/partners/program/why-partner-with-us/) (<https://info.mobilerobot.com/partners/program/why-partner-with-us/>): after-sales business flows through the partner, who keeps the revenue from local human services while the company supplies parts and software. Current partner pricing, discount tiers, and program terms are available from the partner team. The relationship is non-exclusive at partner level.

How do I apply?

[Contact the company](https://info.mobilerobot.com/partners/become-a-partner/contact-the-partner-team/) (<https://info.mobilerobot.com/partners/become-a-partner/contact-the-partner-team/>), at hello@mobilerobot.com or through www.mobilerobot.com (<https://www.mobilerobot.com>) to discuss joining the network. See the [partner section](https://info.mobilerobot.com/category/partners/) (<https://info.mobilerobot.com/category/partners/>) for more on the program.

Robot Will Not Start

Work through these checks in order when the J1600 does not power on or does not respond. If the robot still does not start afterwards, contact support through the channels on [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (<https://info.mobilerobot.com/support/contact/submit-a-support-request/>).

Check the key switch

The J1600 has 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, and automatic mode. If the switch is in the power-off position, the robot has no power. Turn the key to the manual or automatic position before expecting any response from the vehicle.

Check the battery charge

The J1600 runs on a [24 V, 200 Ah lithium iron phosphate \(LiFePO4\) battery](https://info.mobilerobot.com/documentation/technical-reference/battery-specifications/) (<https://info.mobilerobot.com/documentation/technical-reference/battery-specifications/>). Even when idle, the battery drains at approximately 2% per hour in standby, so a robot left unplugged for an extended period — a weekend or a holiday — can arrive at a depleted battery.

To recover:

1. Plug in the manual charger, or send the robot to its automatic charging station if one is installed.
2. Allow time to charge. The charging rate is approximately 47 percentage points per hour, so a full charge from empty takes a little over two hours.

See [Charging problems](https://info.mobilerobot.com/support/troubleshooting/charging-problems/) (<https://info.mobilerobot.com/support/troubleshooting/charging-problems/>) if the battery does not charge as expected.

Check the emergency-stop controls

The J1600 has [three emergency-stop buttons](https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/>), and the [tiller position](https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/>).

mobilerobot.com/safety-compliance/safety-functions/tiller-detection/) also acts as an emergency-stop control. Make sure no emergency-stop button is engaged and the tiller is in a normal operating position before trying to start the robot.

 WARNING

Do not open the chassis or attempt electrical repairs yourself. Service and repairs are handled through your service partner — see [Find a service partner](https://info.mobilerobot.com/support/contact/find-a-service-partner/) (<https://info.mobilerobot.com/support/contact/find-a-service-partner/>).

Still not starting

If the key switch, battery, and emergency stops all check out and the robot still does not power on, submit a support request. The on-machine route is normally unavailable if the robot has no power, so use the support portal or contact your service partner directly.

Robot Will Not Enter Autonomous Mode

The J1600 only drives autonomously when the operator has explicitly handed it a task and [confirmed the mode change](https://info.mobilerobot.com/documentation/getting-started/manual-and-autonomous-modes/) (<https://info.mobilerobot.com/documentation/getting-started/manual-and-autonomous-modes/>). Most failures to enter autonomous mode come down to one of the preconditions below.

Confirm the key switch position

The [three-position key switch](https://info.mobilerobot.com/safety-compliance/safety-functions/mode-selection/) (<https://info.mobilerobot.com/safety-compliance/safety-functions/mode-selection/>) selects power off, manual only, or automatic mode. In the manual-only position the robot never drives itself. Turn the key to the automatic position.

Select a task and confirm it

[Autonomous driving](https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/) (<https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/>) always starts from a task:

1. Create or select a task on the touchscreen, with a saved destination.
2. Execute the task. The robot asks for confirmation to enter automatic mode.
3. Confirm using the physical LED start/resume button. On-screen selection alone does not start autonomous driving.

If the destination you need is not in the list, it has not been saved yet — see [Task and location problems](https://info.mobilerobot.com/support/troubleshooting/task-and-location-problems/) (<https://info.mobilerobot.com/support/troubleshooting/task-and-location-problems/>).

Step clear of the robot

After confirmation, the interface instructs the operator to step away. The robot's 360-degree safety field must be clear before it moves. If you or anyone else is standing inside the protected area — shown by the blue floor lights — the robot will not drive off. See [Obstacle or safety-field stops](https://info.mobilerobot.com/support/troubleshooting/obstacle-or-safety-field-stops/) (<https://info.mobilerobot.com/support/troubleshooting/obstacle-or-safety-field-stops/>).

Release the tiller

Grabbing or moving the tiller is the [takeover mechanism](https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/) that returns the J1600 to manual control, and [tiller-position switches](https://info.mobilerobot.com/safety-compliance/safety-functions/tiller-detection/) are part of the safety system. Make sure the tiller is released and in its normal position when you confirm automatic mode.

Check the floor

Autonomous mode is a [level-floor application](https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/): automatic gradeability is 0%. Slopes, ramps, and dock plates are manual territory. If the task would send the robot up or down a gradient, [drive that portion manually](https://info.mobilerobot.com/documentation/user-guides/manual-operation/) instead.

Still stuck in manual mode

If all preconditions are met and the robot still refuses the mode change, contact support — see [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/). For how the mode handover is designed to work, see [Dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/).

Navigation Problems

The J1600 navigates with [3D LiDAR SLAM](https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) (simultaneous localization and mapping) on an industrial NVIDIA Jetson AI computer. It builds and continuously updates a three-dimensional map of the facility while an operator drives it manually, then plans its own routes to saved destinations — without tracks, wires, reflectors, or other building modifications. When navigation misbehaves, check the points below.

The layout has changed

The robot updates its understanding of the environment continuously during manual driving. After a major [layout change](https://info.mobilerobot.com/applications/scenarios/dynamic-route-changes/) — moved racking, new walls, relocated work cells — drive the robot manually through the changed area so it can refresh its map. Everyday changes such as parked pallets and moving people are handled by obstacle avoidance and do not require remapping. See [Mapping problems](https://info.mobilerobot.com/support/troubleshooting/mapping-problems/).

The route is blocked

The J1600 detects obstacles and routes around them in dynamic environments. If a route is fully blocked, [clear the obstruction](https://info.mobilerobot.com/support/troubleshooting/obstacle-or-safety-field-stops/) or take over manually with the tiller — improvising a path through a [crowded floor](https://info.mobilerobot.com/applications/scenarios/operation-in-crowded-environments/) is exactly the kind of judgment the operator keeps in a [dual-mode](https://info.mobilerobot.com/products/j1600/dual-mode/) vehicle.

Preferred travel zones can be defined so the robot favors safer routes through production areas.

The floor is outside specification

Autonomous driving assumes an [indoor, level floor](https://info.mobilerobot.com/applications/planning/route-and-floor-suitability/):

Condition	Limit
Gradeability, automatic mode	0° / 0%
Maximum traversable bump height	25 mm / 1 in
Maximum traversable gap width	20 mm / 0.8 in
Floor flatness/levelness	TR34 FM3 (FF 25 / FL 20)

Slopes and dock plates are handled in [manual mode](https://info.mobilerobot.com/documentation/user-guides/manual-operation/) (<https://info.mobilerobot.com/documentation/user-guides/manual-operation/>), where gradeability is 5% unloaded and 3% at full load.

The environment is outside specification

The J1600 is rated IP21 and operates at 5–40 °C (41–104 °F) with 20–80% non-condensing relative humidity. Cold stores, outdoor yards, and wet areas fall outside the [operating envelope](https://info.mobilerobot.com/documentation/installation/operating-environment-requirements/) (<https://info.mobilerobot.com/documentation/installation/operating-environment-requirements/>). See the full [technical specifications](https://info.mobilerobot.com/products/j1600/technical-specifications/) (<https://info.mobilerobot.com/products/j1600/technical-specifications/>).

Still misbehaving

If navigation problems persist on a compliant floor with a current map, contact support — see [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (<https://info.mobilerobot.com/support/contact/submit-a-support-request/>).

Mapping Problems

The J1600 [maps by driving](https://info.mobilerobot.com/documentation/getting-started/creating-the-first-map/) (<https://info.mobilerobot.com/documentation/getting-started/creating-the-first-map/>): an operator drives it manually through the facility with the tiller, and the robot continuously learns and updates a three-dimensional model of its environment using [3D LiDAR SLAM](https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) (<https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/>). No tracks, wires, reflectors, or building modifications are involved. Most mapping problems are coverage problems.

The robot does not know an area

The robot only knows areas it has been driven through. To extend coverage, drive it manually through every aisle and zone it should later travel autonomously. The 3D LiDAR scans environmental structures at heights of up to 70 m above the vehicle, so large halls are mapped from floor level without extra equipment.

A destination is missing

Destinations are [saved locations](https://info.mobilerobot.com/documentation/user-guides/location-management/) (<https://info.mobilerobot.com/documentation/user-guides/location-management/>), not map annotations made at a desk:

1. Drive the robot manually to the exact drop point.
2. Tap **Save location** on the touchscreen.
3. Name the point — for example "Pallet Bay 1".

There is no software limit on the number of saved locations; the practical limit is your floor space. Saved points can be freely recombined into tasks without teaching every origin-destination pair. See [Task and location problems](https://info.mobilerobot.com/support/troubleshooting/task-and-location-problems/) (<https://info.mobilerobot.com/support/troubleshooting/task-and-location-problems/>).

The map is out of date

After a significant [layout change](https://info.mobilerobot.com/applications/scenarios/dynamic-route-changes/) (<https://info.mobilerobot.com/applications/scenarios/dynamic-route-changes/>), drive the robot manually through the changed area so the map refreshes. Day-to-day clutter does not require this — obstacle avoidance deals with

temporary objects, which is what makes the J1600 suitable for [brownfield sites](https://info.mobilerobot.com/applications/use-cases/brownfield-automation/) (<https://info.mobilerobot.com/applications/use-cases/brownfield-automation/>) and changing layouts.

A location has physically moved

If a [drop point](https://info.mobilerobot.com/documentation/installation/mapping-and-drop-point-setup/) (<https://info.mobilerobot.com/documentation/installation/mapping-and-drop-point-setup/>) moves — a staging area is relocated, a buffer zone shifts — drive to the new position and save it again. Adding or moving a location takes minutes and needs no automation expert.

Still having trouble

If the robot cannot localize or [repeatedly loses its way in a mapped area](https://info.mobilerobot.com/support/troubleshooting/navigation-problems/) (<https://info.mobilerobot.com/support/troubleshooting/navigation-problems/>), contact support — see [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (<https://info.mobilerobot.com/support/contact/submit-a-support-request/>).

Obstacle or Safety-Field Stops

A J1600 that stops during [an autonomous task](https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/) is usually doing its job. The vehicle carries a 360-degree protective field, monitored by two 2D safety LiDAR scanners and an independent safety controller, and it stops when a person or object enters that field. This page explains the behavior and how to get moving again.

How the safety field behaves

- The protective field surrounds the vehicle and supports both forward and reverse autonomous travel.
- The field is [speed-dependent](https://info.mobilerobot.com/safety-compliance/safety-functions/safety-field-adjustment/): it expands as travel speed increases.
- Blue light strips project the current protected area onto the floor. White lights indicate manual mode.
- [Person detection](https://info.mobilerobot.com/safety-compliance/safety-functions/person-detection/) and [braking](https://info.mobilerobot.com/safety-compliance/safety-functions/braking/) are certified safety functions within the layered safety architecture. For the design, see [How J1600 safety works](https://info.mobilerobot.com/safety-compliance/safety-overview/how-j1600-safety-works/).

Resuming after a stop

1. Clear the safety field — step out of the protected area and remove any obstruction.
2. Press the LED start/resume button to continue the task.

The robot also [avoids obstacles](https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) on its own: where a path exists, it routes around objects and people rather than stopping. A full stop typically means the field itself was breached or [no clear route remained](https://info.mobilerobot.com/support/troubleshooting/navigation-problems/).

Frequent stops on a route

If a route triggers constant stops:

- Reduce congestion on the route, or define preferred travel zones so the robot favors calmer paths through production areas.
- For [genuinely crowded areas](https://info.mobilerobot.com/applications/scenarios/operation-in-crowded-environments/) (https://info.mobilerobot.com/applications/scenarios/operation-in-crowded-environments/), — an overflowing receiving zone at truck arrival, for example — take over with the tiller and drive the congested portion manually. Immediate manual takeover is a core part of [dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/) (https://info.mobilerobot.com/products/j1600/dual-mode/).

Other stop controls

Stops can also come from deliberate controls rather than the safety field:

- [three emergency-stop buttons](https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/) (https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/);
- the belly button on the tiller, which stops the vehicle and reverses it away from the operator;
- grabbing or moving the tiller, which returns the robot to manual control;
- [tiller-position switches](https://info.mobilerobot.com/safety-compliance/safety-functions/tiller-detection/) (https://info.mobilerobot.com/safety-compliance/safety-functions/tiller-detection/), which act as emergency-stop and manual-control inputs.

Check whether one of these was activated before assuming a fault.

When it is not safety behavior

If the robot stops with a clear field, no engaged stop control, and a valid route, contact support — see [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (https://info.mobilerobot.com/support/contact/submit-a-support-request/).

Charging Problems

The J1600 uses a [24 V, 200 Ah lithium iron phosphate \(LiFePO4\) battery](https://info.mobilerobot.com/documentation/technical-reference/battery-specifications/) and supports [two charging methods](https://info.mobilerobot.com/documentation/user-guides/charging/): manual plug-in charging and an optional automatic charging station. Before treating charging behavior as a fault, compare it with the expected rates below.

Expected rates

Behavior	Rate
Charging	approximately 47 percentage points per hour
Drain, driving fully loaded	approximately 13% per hour
Drain, driving unloaded	approximately 12% per hour
Drain, standby	approximately 2% per hour

Runtime exceeds eight hours in a typical duty cycle. The drain rates imply roughly 7.7 hours of continuous fully loaded driving or 8.3 hours unloaded, but these are calculated figures, not guaranteed runtimes — standby time, lifting, duty cycle, battery reserve, and operating conditions all affect the result.

A battery that loses around 2% per hour while the robot sits idle is behaving normally, not leaking charge. A robot parked unplugged over a weekend can reasonably arrive at a low battery — see [Robot will not start](https://info.mobilerobot.com/support/troubleshooting/robot-will-not-start/).

Manual charging

[Manual charging](https://info.mobilerobot.com/products/chargers-and-accessories/manual-charger/) works like a conventional electric pallet jack: plug in the charger during a break or whenever the machine is idle. If the robot does not charge, verify that the charger is connected at both ends and powered.

Automatic charging does not happen

[Automatic charging](https://info.mobilerobot.com/applications/scenarios/automatic-charging/) (<https://info.mobilerobot.com/applications/scenarios/automatic-charging/>) is an optional, advanced automation capability that requires the automatic charger. When it works, the robot drives to the station, positions itself at the charger, and a charging interface extends to the vehicle's charging plates — enabling opportunity charging whenever the robot is not busy.

If the robot never charges itself, check that:

- an [automatic charger](https://info.mobilerobot.com/products/chargers-and-accessories/automatic-charger/) (<https://info.mobilerobot.com/products/chargers-and-accessories/automatic-charger/>) was actually purchased — the manual charger does not support self-docking;
- [the station was set up](https://info.mobilerobot.com/documentation/installation/charger-installation/) (<https://info.mobilerobot.com/documentation/installation/charger-installation/>) and commissioned. When bought with the installation and commissioning package, automatic-charging setup is part of Day 1 on site.

Unresolved charging faults

For a charger that stays dead, a battery that will not accept charge, or a robot that fails to dock despite a commissioned station, contact support — see [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (<https://info.mobilerobot.com/support/contact/submit-a-support-request/>).

WARNING

Do not open the battery compartment or service the charger yourself. Battery and charger service goes through [your service partner](https://info.mobilerobot.com/support/contact/find-a-service-partner/) (<https://info.mobilerobot.com/support/contact/find-a-service-partner/>).

Task and Location Problems

Tasks on the J1600 are built from [saved locations](https://info.mobilerobot.com/documentation/user-guides/location-management/) and a chosen post-delivery behavior, all from the touchscreen. Most task problems trace back to how the task was created rather than to a fault.

A destination is not in the list

Only saved locations appear as destinations. To add one, [drive the robot manually to the point, tap **Save location**, and name it](https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/). There is no software limit on the number of saved locations. See [Mapping problems](https://info.mobilerobot.com/support/troubleshooting/mapping-problems/) for coverage and re-saving moved locations.

The robot will not drop at height

This is by design. Autonomous pallet delivery is at floor level. Picking and dropping at heights up to 1,600 mm (63 in) is a manual capability, performed by the operator with the tiller. If a task seems to need an elevated autonomous drop, restructure it so the robot delivers at floor level and an operator handles any elevated placement.

The robot will not pick up a pallet by itself

Also by design: pallet pickup is always manual. [The operator judges pallet condition, load stability, and fork placement](https://info.mobilerobot.com/safety-compliance/safe-deployment/operator-responsibilities/), then hands the transport portion to the robot. See [Dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/) for the reasoning.

The robot does the wrong thing after delivering

What happens after the drop is part of the task definition. When creating a task you choose among the [post-delivery behaviors](https://info.mobilerobot.com/documentation/user-guides/task-management/): return to the origin or operator, go to another saved point or

to parking, or stop and wait at the destination. If the robot waits when you expected it back, check which option the task uses — the common patterns are:

- **Boomerang** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-return/>) — deliver and return to origin.
- **Simple ABC** (<https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/>) — deliver from A to B, then travel to C.
- **Drop and wait** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/>) — deliver and remain at the destination.
- **Deliver and park** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-park/>) — deliver, then proceed to a parking location.

Come-to-me does not work

[Calling the robot to you](https://info.mobilerobot.com/applications/scenarios/come-to-me/) (<https://info.mobilerobot.com/applications/scenarios/come-to-me/>) through a mobile app or web interface is an advanced automation function. If it is unavailable, your robot may be running the [Standard software](https://info.mobilerobot.com/products/software/standard-software/) (<https://info.mobilerobot.com/products/software/standard-software/>); ask your partner about the Advanced software. See [Software upgrade entitlements](https://info.mobilerobot.com/support/service-warranty/software-upgrade-entitlements/) (<https://info.mobilerobot.com/support/service-warranty/software-upgrade-entitlements/>).

The load itself is the problem

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/>), within a 1,250 x 1,250 mm footprint (including overhang) and a load height of up to 1,700 mm from the floor, at up to 1,600 kg. A task that fails with a specific pallet type may be a compatibility issue rather than a task issue — see the [technical specifications](https://info.mobilerobot.com/products/j1600/technical-specifications/) (<https://info.mobilerobot.com/products/j1600/technical-specifications/>).

Unresolved task problems

If tasks fail despite correct locations and settings, contact support — see [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (<https://info.mobilerobot.com/support/contact/submit-a-support-request/>).

Connectivity Problems

The J1600 is designed so that basic operation does not depend on a network. If you are troubleshooting a network issue, the first question is whether the affected function actually needs connectivity.

What works without Wi-Fi

Wi-Fi is optional for basic use (<https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/>). The out-of-the-box workflow — manual driving, mapping by driving, saving locations, creating and running tasks from the touchscreen, autonomous delivery — requires neither Wi-Fi nor any mandatory warehouse-management-system (WMS), fleet-manager, or IT integration (<https://info.mobilerobot.com/applications/results/lower-integration-complexity/>). A network outage does not stop a robot running standard teach-and-repeat (<https://info.mobilerobot.com/documentation/concepts/teach-and-repeat/>) tasks.

What depends on connectivity

Connectivity comes into play with the advanced capabilities:

- **Come-to-me** (<https://info.mobilerobot.com/applications/scenarios/come-to-me/>) — calling the robot through a mobile app or web interface.
- **VDA 5050** (<https://info.mobilerobot.com/documentation/concepts/vda-5050-explained/>), **fleet management** — operating the J1600 under a compatible multi-vendor fleet layer.
- **REST API integrations** (<https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/>) — connecting the robot to other software or equipment.
- **Fleet Manager** (<https://info.mobilerobot.com/products/software/fleet-manager/>) — orchestrating multiple robots.

These belong to the Advanced software (<https://info.mobilerobot.com/products/software/advanced-software/>); see Software upgrade entitlements (<https://info.mobilerobot.com/support/service-warranty/software-upgrade-entitlements/>). If fleet coordination or app-based calls

stop working while on-screen tasks run normally, investigate the site network and the fleet or integration layer rather than the robot's basic functions.

Wi-Fi during commissioning

Connecting the robot to Wi-Fi is optional and, when wanted, is part of Day 1 of the installation and commissioning package.

Getting help

Remote support is easier to deliver when the robot can be reached, but a support request never requires the robot to be online — the support portal and [your service partner](https://info.mobilerobot.com/support/contact/find-a-service-partner/) (<https://info.mobilerobot.com/support/contact/find-a-service-partner/>) are always available. See [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (<https://info.mobilerobot.com/support/contact/submit-a-support-request/>).

Operator Training

The J1600 is built so that an existing electric-pallet-jack operator needs about **30 minutes of training** to use it. No code, no configuration screens — operation happens through the tiller and a [15-inch multi-touch display](https://info.mobilerobot.com/documentation/technical-reference/interface-specifications/) (<https://info.mobilerobot.com/documentation/technical-reference/interface-specifications/>).

What an operator learns

- [driving manually with the tiller](https://info.mobilerobot.com/documentation/user-guides/manual-operation/) (<https://info.mobilerobot.com/documentation/user-guides/manual-operation/>), which handles like a conventional walk-behind electric pallet jack;
- [saving locations](https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/) (<https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/>) by driving to a point and tapping **Save location**;
- creating tasks: choosing a destination and what the robot does after the drop;
- [confirming autonomous mode](https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/) (<https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/>) with the physical start/resume button and stepping clear;
- taking over at any time by grabbing the tiller, and using the stop controls.

At [demonstrations](https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/) (<https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/>), a first-time user is typically able to send the robot on an autonomous task within roughly 15 minutes. See the [J1600 overview](https://info.mobilerobot.com/products/j1600/overview/) (<https://info.mobilerobot.com/products/j1600/overview/>) for the full workflow.

Self-paced learning

An operator tutorial is available on the device itself and online. Short video walk-throughs cover the most common procedures — see [Training videos](https://info.mobilerobot.com/support/training/training-videos/) (<https://info.mobilerobot.com/support/training/training-videos/>).

Training during commissioning

If you purchase the [installation and commissioning package](https://info.mobilerobot.com/products/buying-and-deployment/installation-and-commissioning/) (<https://info.mobilerobot.com/products/buying-and-deployment/installation-and-commissioning/>), operator training is built

into the five-day program:

- **Day 2:** group training for all operators, plus individual hands-on practice for up to six operators.
- **Days 3–4:** additional operator training as needed, alongside performance monitoring and on-site support.

Training during a trial

A [two-week paid trial](https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/) (<https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/>) includes one full day of on-site deployment and training support, so trial operators start with the same fundamentals.

Safety expectations

[Operators keep specific responsibilities](https://info.mobilerobot.com/documentation/user-guides/operator-manual/) (<https://info.mobilerobot.com/documentation/user-guides/operator-manual/>) in a [dual-mode](https://info.mobilerobot.com/products/j1600/dual-mode/) (<https://info.mobilerobot.com/products/j1600/dual-mode/>) vehicle: judging loads, confirming the mode change, and stepping clear before autonomous travel. 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/>).

Technician Training

Service on the J1600 is performed by trained field-service technicians employed by service partners. This page describes how that training is organized.

Who is trained

Partners in the distribution network employ field-service technicians and keep their product training current — it is one of the standing expectations of a service partner. Customers do not service the robot themselves; even the [Advanced software upgrade](https://info.mobilerobot.com/products/software/advanced-software/) (<https://info.mobilerobot.com/products/software/advanced-software/>) is installed at the factory or by a partner, never by the customer.

How partner technicians are trained

New partners receive a **two-day sales and service training workshop** from The Mobile Robot Company as part of partner onboarding. After the workshop, partners have **unlimited remote support** from the company's technical team, plus on-site deployment-support days for early installations. Further support days can be purchased when needed.

Each partner also appoints an internal product **Champion** — the resident expert and main technical contact for that partner.

What this means for customers

When a technician arrives on site, the work is backed by the company's parts supply, software, and technical support. See [On-site support](https://info.mobilerobot.com/support/service-warranty/on-site-support/) (<https://info.mobilerobot.com/support/service-warranty/on-site-support/>) for how visits are arranged and priced, and [Find a service partner](https://info.mobilerobot.com/support/contact/find-a-service-partner/) (<https://info.mobilerobot.com/support/contact/find-a-service-partner/>) to get connected with a trained partner.

Organizations interested in [becoming a partner](https://info.mobilerobot.com/partners/program/why-partner-with-us/) (<https://info.mobilerobot.com/partners/program/why-partner-with-us/>) can start at the [partner section](https://info.mobilerobot.com/category/partners/) (<https://info.mobilerobot.com/category/partners/>).



Training Videos

The Mobile Robot Company publishes [short public videos](https://info.mobilerobot.com/newsroom/videos/full-video-library/) (<https://info.mobilerobot.com/newsroom/videos/full-video-library/>) that double as training material. The most instructional ones are listed below; each takes a few minutes and pairs well with the hands-on basics in [Operator training](https://info.mobilerobot.com/support/training/operator-training/) (<https://info.mobilerobot.com/support/training/operator-training/>).

How-to tutorials

Video	What it shows
How to add a drop location and create tasks (https://www.youtube.com/watch?v=OGiOVtdKbk8)	Drive manually to the drop point, tap Save Location, name it, create a task, choose the post-drop behavior, execute, confirm automatic mode, and step back.
How to charge your robot (https://www.youtube.com/watch?v=l6GJ07Kbi4Y)	Manual plug-in charging during a break, and how the optional automatic charger docks the robot for opportunity charging.

Understanding operation

Video	What it shows
What is dual mode (https://www.youtube.com/watch?v=MgmWCbdoge8)	Manual pallet-jack operation plus automatic mode: pick up manually, choose the drop location, press the go button, step away.
The most common task (https://www.youtube.com/watch?v=b0a0QWWNlws)	Manual pick, autonomous delivery, drop, and return — plus the three standard post-drop options and what the blue light means.
How many pallet locations can I have (https://www.youtube.com/watch?v=RZEsjQgnBvk)	There is no software limit on saved locations; the practical limit is warehouse space.
Extra capabilities of the dual-mode J1600 (https://www.youtube.com/watch?v=HKGv7uzNxlw)	Using manual judgment for sensitive or unstable loads and confined maneuvering, then handing the long transport leg to autonomous mode.
Can anyone automate a pallet move in minutes? (https://www.youtube.com/watch?v=PHBLT4XyvyI)	A first-time user drives the J1600, saves a location, creates a drop-and-return task, and confirms automatic mode.

Support and evaluation

Video	What it shows
How to get help with a technical issue (https://www.youtube.com/watch?v=2Q5NFYGSmhA)	The on-machine Help/Support menu and QR code for sending a technical request, and the three service packages.
From trial to proof of concept (https://www.youtube.com/watch?v=FI0_kXSPRrQ)	Testing in the Copenhagen demo area versus running a proof of concept at your own plant.

For written versions of these procedures, see the [How-To Guides](https://info.mobilerobot.com/documentation/user-guides/how-to-guides/) (<https://info.mobilerobot.com/documentation/user-guides/how-to-guides/>) in the [documentation section](https://info.mobilerobot.com/category/documentation/) (<https://info.mobilerobot.com/category/documentation/>). For support channels, see [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (<https://info.mobilerobot.com/support/contact/submit-a-support-request/>).

Find a Service Partner

The Mobile Robot Company sells and services the J1600 through an international network of [distributors, integrators, and service partners](https://info.mobilerobot.com/partners/program/partner-types/) (<https://info.mobilerobot.com/partners/program/partner-types/>). [List prices are public](https://info.mobilerobot.com/products/j1600/pricing-and-roi/) (<https://info.mobilerobot.com/products/j1600/pricing-and-roi/>), but the company [does not sell robots directly to end users](https://info.mobilerobot.com/company/about/business-model/) (<https://info.mobilerobot.com/company/about/business-model/>) — every inquiry is routed to a partner who handles the local relationship.

How to get connected

1. [Contact the company](https://info.mobilerobot.com/company/locations/contact-information/) (<https://info.mobilerobot.com/company/locations/contact-information/>), through www.mobilerobot.com (<https://www.mobilerobot.com>) or by email at hello@mobilerobot.com.
2. Your inquiry is assigned to a partner — as a rule of thumb, the partner with the nearest experience center, a showroom with a dedicated robot where you can try the J1600 hands-on.
3. The partner follows up for demonstrations, trials, [quotes](https://info.mobilerobot.com/products/buying-and-deployment/request-a-quote/) (<https://info.mobilerobot.com/products/buying-and-deployment/request-a-quote/>), deployment, and service.

What partners do

Partners deliver [local demonstrations](https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/) (<https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/>) (typically 30–60 minutes, hands-on), [two-week paid trials](https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/) (<https://info.mobilerobot.com/products/buying-and-deployment/two-week-trial/>), [installation and commissioning](https://info.mobilerobot.com/products/buying-and-deployment/installation-and-commissioning/) (<https://info.mobilerobot.com/products/buying-and-deployment/installation-and-commissioning/>), after-sales service with [trained field-service technicians](https://info.mobilerobot.com/support/training/technician-training/) (<https://info.mobilerobot.com/support/training/technician-training/>), and spare parts — backed by the company's parts supply, software, technical support, and training.

Where partners exist

The J1600 is [available worldwide](https://info.mobilerobot.com/partners/become-a-partner/country-availability/) (<https://info.mobilerobot.com/partners/become-a-partner/country-availability/>), including the United States, Canada, Australia, and China. As of June

2026 the company had distributor partnerships in eight countries, with the network expanding. A public list of partners by country is not available — contact the company to be matched with coverage for your location, and confirm country-specific terms, delivery, and service coverage with the partner.

Becoming a partner

[Qualified integrators, distributors, and service partners](https://info.mobilerobot.com/partners/become-a-partner/who-we-are-looking-for/) (<https://info.mobilerobot.com/partners/become-a-partner/who-we-are-looking-for/>). [can apply by country](https://info.mobilerobot.com/partners/program/application-process/) (<https://info.mobilerobot.com/partners/program/application-process/>). See the [partner section](https://info.mobilerobot.com/category/partners/) (<https://info.mobilerobot.com/category/partners/>).

Emergency Contact Guidance

If a situation with the J1600 requires immediate action, stop the robot first, then report.

Stopping the robot immediately

The J1600 provides several independent ways to stop it at once:

- **Emergency-stop buttons** (<https://info.mobilerobot.com/safety-compliance/safety-overview/emergency-stops-and-manual-takeover/>) — the vehicle has three; press the nearest one.
- **The tiller** — grabbing or moving the tiller returns the robot to manual control immediately, and **tiller-position switches** (<https://info.mobilerobot.com/safety-compliance/safety-functions/tiller-detection/>), also act as an emergency stop.
- **The belly button** — stops the vehicle and reverses it away from the operator.
- **The key switch** — turning it to the power-off position removes power.

The robot also [stops on its own when a person enters its 360-degree protective field](https://info.mobilerobot.com/support/troubleshooting/obstacle-or-safety-field-stops/) (<https://info.mobilerobot.com/support/troubleshooting/obstacle-or-safety-field-stops/>). For how these layers work together, 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/>).

WARNING

If anyone is injured, follow your site's emergency procedures and contact local emergency services first. This page covers stopping the machine and reporting the issue — it does not replace your site's own emergency and first-aid procedures.

Reporting an urgent technical issue

After the situation is under control:

1. Leave the robot stopped. Do not return it to service until the cause is understood.

2. Contact your service partner directly — the fastest route for urgent local help. See [Find a service partner](https://info.mobilerobot.com/support/contact/find-a-service-partner/) (https://info.mobilerobot.com/support/contact/find-a-service-partner/).
3. Raise a support request so the company's technical team is involved: use the Help/Support QR code on the machine or the support portal. See [Submit a support request](https://info.mobilerobot.com/support/contact/submit-a-support-request/) (https://info.mobilerobot.com/support/contact/submit-a-support-request/).

There is no separate published emergency hotline; urgent issues travel through the partner and the standard support channels, with priority remote support for [Full Care](https://info.mobilerobot.com/support/service-warranty/full-care/) (https://info.mobilerobot.com/support/service-warranty/full-care/) customers. [General contact for The Mobile Robot Company](https://info.mobilerobot.com/company/locations/contact-information/) (https://info.mobilerobot.com/company/locations/contact-information/) is **hello@mobilerobot.com**.