



The Mobile Robot Company

Knowledge Center — External System Integration · 2026-08-04

<https://info.mobilerobot.com/documentation/technical-integration/external-system-integration>

External System Integration

This page covers connecting the J1600 to systems outside the robot: warehouse management systems (WMS), fleet layers, site software, and other equipment. It is for teams deciding whether, when, and how to integrate.

Integration is a choice, not a requirement

The J1600's [basic workflow](https://info.mobilerobot.com/products/j1600/how-it-works/) — map by driving, [save locations](https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/), launch tasks from the touchscreen — requires no WMS, no fleet manager, [no Wi-Fi](https://info.mobilerobot.com/documentation/installation/network-and-wi-fi-requirements/), and no IT project. Optional rather than mandatory systems integration is a [core design principle](https://info.mobilerobot.com/company/about/our-approach-to-automation/): a deployment can stay standalone for its entire life, or scale into a connected system when the application grows.

This matters for cost. Full automation of a pallet flow typically requires WMS-to-fleet-manager integration, precise load data, and tightly controlled processes. Keeping the operator in the loop lets the J1600 skip that layer for most deployments. See [human-in-the-loop automation](https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/).

Available integration routes

Route	Use it for	Requires
VDA 5050 (https://info.mobilerobot.com/documentation/technical-integration/vda-5050-documentation/)	Fleet coordination, including multi-vendor fleets under one compatible fleet layer	Advanced software
REST API (https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/)	Direct integration with other software and equipment	Advanced software
Fleet Manager (https://info.mobilerobot.com/documentation/technical-integration/fleet-manager-guide/)	Orchestrated multi-J1600 deployments and advanced mission planning	Per-robot license

The [Advanced software upgrade](https://info.mobilerobot.com/products/software/advanced-software/) (<https://info.mobilerobot.com/products/software/advanced-software/>) (€14,500 end-user list) covers VDA 5050, the REST API, advanced mission planning, and advanced system integration with other software and equipment. It is easiest to install at the factory with the robot order; a partner can retrofit it, and customers cannot install it themselves.

Who performs the integration

Integration with other software and equipment is offered as an add-on to the five-day [installation and commissioning package](https://info.mobilerobot.com/documentation/technical-integration/system-integrator-technical-guide/) (<https://info.mobilerobot.com/documentation/technical-integration/system-integrator-technical-guide/>) (€10,000 end-user list), which also handles feasibility, drop points, task and safety validation, training, and acceptance testing. On-site engineering support lists at €2,400 per day plus travel. Partners and The Mobile Robot Company deliver this work; contact your partner or hello@mobilerobot.com to scope a project.

Typical scaling sequence

1. **Standalone start.** One robot, [Standard software](https://info.mobilerobot.com/products/software/standard-software/) (<https://info.mobilerobot.com/products/software/standard-software/>), [teach-and-repeat](https://info.mobilerobot.com/documentation/concepts/teach-and-repeat/) (<https://info.mobilerobot.com/documentation/concepts/teach-and-repeat/>) tasks. Value from day one, [no integration](https://info.mobilerobot.com/applications/results/lower-integration-complexity/) (<https://info.mobilerobot.com/applications/results/lower-integration-complexity/>).

2. **Connected functions.** Add Wi-Fi to use [come-to-me](https://info.mobilerobot.com/applications/scenarios/come-to-me/) (https://info.mobilerobot.com/applications/scenarios/come-to-me/) (calling the robot from a mobile app or web interface) and automatic charging.
3. **Fleet and systems.** Upgrade to Advanced software for VDA 5050, the REST API, and Fleet Manager when several robots or external systems enter the picture.

For concrete task patterns at each stage, see [example workflows](https://info.mobilerobot.com/documentation/technical-integration/example-workflows/) (https://info.mobilerobot.com/documentation/technical-integration/example-workflows/).