UNITED ROBOTICS GROUP
the CobiotX company

USER MANUAL

uLog Locker

Transport in locked containers

Product	uLog Locker
Covers	uLog Locker
Version	1.0
Date	11.09.2026
Language	English
Classification	public

FIRST ISSUE

This is the first edition of the user manual for uLog Locker. It describes the unit as it is delivered today: chassis and operation of the uLog range with **uGo** on the screen of the column, plus the locker body with two locked containers, its own screen and a reader for NFC cards and QR codes. Software level of this edition: uGo 1.0.8, Kiosk 1.0.3, network guard (Netzschranke) 1.1.9.

Authoring and approval

Step	Function	Date
Written by	Product Management and Service	11.09.2026
Reviewed by	Product Management and Service	11.09.2026
Approved by	Quality Management Representative	11.09.2026

Change log

Version	Date	Description of change
1.0	11.09.2026	First issue. Structure follows the user manual of the uLog range 2.0. Unit data from the data sheet 2.0 and the service description, operation of the locker body from the product documentation of the body.

Contents

1 Safety and usage notes 3
- Safety labels
- Where the product is used
- Transport and storage
- Maintenance and after-sales service

2 The uLog Locker at a glance 5
- Standard equipment
- The controls

3 Commissioning and charging 7
- Switching on and off
- The locker body
- The charging station
- Emergency stop

4 Operation on the screen (uGo) 9
- Reading the status bar
- Issuing a job
- During the journey
- When the robot reports a fault

5 Containers and locking 15
- Cards and codes
- Opening a container
- Loading
- Managing cards and codes

6 Handover to the recipient 16

7 Inspection and maintenance 17

8 Faults 18

9 Technical data 19
- Locker body
- Driving and navigation
- Chassis and operating environment
- Charging and network connection
- Conformity

10 Contact and support 21

1 Safety and usage notes

Please avoid the following. Where they occur, the operator bears the associated costs, legal responsibilities and risks.

- Using, maintaining or storing the product other than as described in this manual, where this causes malfunction or damage.
- Damage from external influences such as incorrect supply voltage, high temperature, ingress of water, mechanical damage, heavy oxidation, rust or burnt circuit boards.
- Damage caused by human action, such as injury from blocking the robot's path or damage from tipping the robot over.
- Use of software that has not been released by us, where this causes malfunction, damage or infection.
- Improper use such as immersion in liquids, damp, mould, or damage by insects or animals.
- Faults or damage caused by force majeure such as fire, earthquake or flood.
- Dismantling the robot or the charging station without our consent. Unauthorised dismantling voids the warranty.
- Use in hazardous environments, for example at high temperatures, under high pressure, or in flammable and explosive areas.
- Use outdoors.
- Use in unsupervised areas or at the edge of stairs and escalators. The robot may fall and cause injury.
- Operation near minors without supervision by a responsible adult.
- Placing parts of the body or objects underneath the chassis.
- Transporting liquids in open containers. There is a risk of spillage, short circuit and scalding.

Notes for day-to-day handling

- As a first-time user, make yourself familiar with the structure and the functions of the robot.
- At first commissioning our staff set up the connection and record the map. Please contact service if you have questions.
- The robot can be fitted with a SIM card so that the connection to the uSuite holds without Wi-Fi. It is available separately.
- Do not pull the robot while it is driving.
- Do not push the switched-on robot against its direction of travel.
- Do not press or push the robot by force.
- If the robot stops in the wrong place, end the job first and only then push it back onto its route.
- Do not cover the sensors while the robot is switched on and moving.
- If the screen stops responding or the robot behaves unexpectedly, press the emergency stop button on top of the robot.

ADDITIONALLY FOR THE LOCKER BODY

The container doors move when opening and closing: keep hands and fingers out of the door area when a door opens. Do not load the containers beyond the rated load of 50 kg. Close both doors before you issue a driving job. Never force a locked door open.

Safety labels

Caution, laser radiation	Direct or scattered laser light can cause serious injury to eyes or skin. Avoid looking directly into the beam.
Caution, crushing hazard	Moving parts can cause crushing or injury. Keep hands and fingers away from the mechanical parts.

Where the product is used

The product is suited to hospitals and laboratories, to production and warehousing, to office buildings and to comparable environments. It plans its own route, locates itself precisely, avoids obstacles and transports material. It is operated through the large screen at the robot, through the uSuite, or through whichever extensions your organisation has booked.

Transport and storage

Secure the robot for storage and transport in its packaging or in a transfer crate. Take measures against damp and shock and secure it for the journey. The product contains lithium batteries and must be transported in accordance with local regulations for lithium batteries.

If the robot is not used for a longer period, charge it to about 50 per cent and store it in a dry place between −20 °C and 65 °C. Any deviation from these transport or storage conditions must be agreed with us beforehand.

Maintenance and after-sales service

If a fault cannot be cleared with the measures in this manual, please contact service. Have the following details ready – they are on the robot's type plate and in the uSuite.

Product name and model	on the type plate
Serial number	on the back of the robot and in the uSuite
Symptom	what the robot does or fails to do, and what the screen says
Time	when it last occurred
Location	building and floor, so the case is assigned to the right unit

NOTE

Reports raised from the uSuite already carry these details. A case created there reaches service with unit, location and history – which shortens handling considerably.

2 The uLog Locker at a glance

uLog Locker transports goods that have to stay locked until they arrive. At the destination the authorised person opens the electronically locked containers by NFC or a QR code. The body sits on a platform of the uLog range.

uLog Locker consists of a uLog range chassis, the locker body with two electronically locked containers and two screens. This manual covers: uLog Locker.



uLog Locker: uLog range chassis, above it the locker body with two locked containers, screen and reader.

Standard equipment

- Two containers with electronic locks
- Built-in 7-inch screen on the locker body with QR code and NFC reader
- Column with 10.1-inch screen and emergency stop button
- Charging station and automatic, wireless charging
- RGB camera and depth camera

- Safety LiDAR
- Loudspeaker and LED lights

The controls

Screen on the column	10.1 inches. uGo runs here: issue jobs, follow the journey, read messages. Chapter 4.
Screen on the locker body	7 inches, 1024 × 600. The containers are released here. Next to it sits the reader for NFC cards and QR codes. Chapter 5.
Emergency stop button	Red button on the head of the unit. Stops the robot at once. Chapter 3.
On/off switch of the body	At the back of the body head. Switches the locker body on and off.
Light strip	Shows the state visibly, together with a loudspeaker for announcements.
Charging interface	Charges wirelessly and fully automatically at the charging station. Chapter 3.

Dimensions, rated load, ambient conditions and conformity are in chapter 9.

3 Commissioning and charging

Map, stations and zones are set up by trained technical personnel on the technician page of uGo; it is protected by the service password and is not needed in normal operation. This chapter describes what has to be done at the unit itself.

Switching on and off

Main switch. The main switch between the battery and the other assemblies sits underneath the robot. It must be on; two beeps confirm this.

Switching on. Press the round silver power button above the chassis. A beep confirms the start.

Switching off. Hold the same button for five seconds. A beep confirms the shutdown.

> **DO NOT SWITCH OFF AT THE MAIN SWITCH**
> Do not switch the robot off at the main switch during operation. A forced shutdown can corrupt files. The main switch is intended for storage and for service, not for the end of the shift.

The locker body

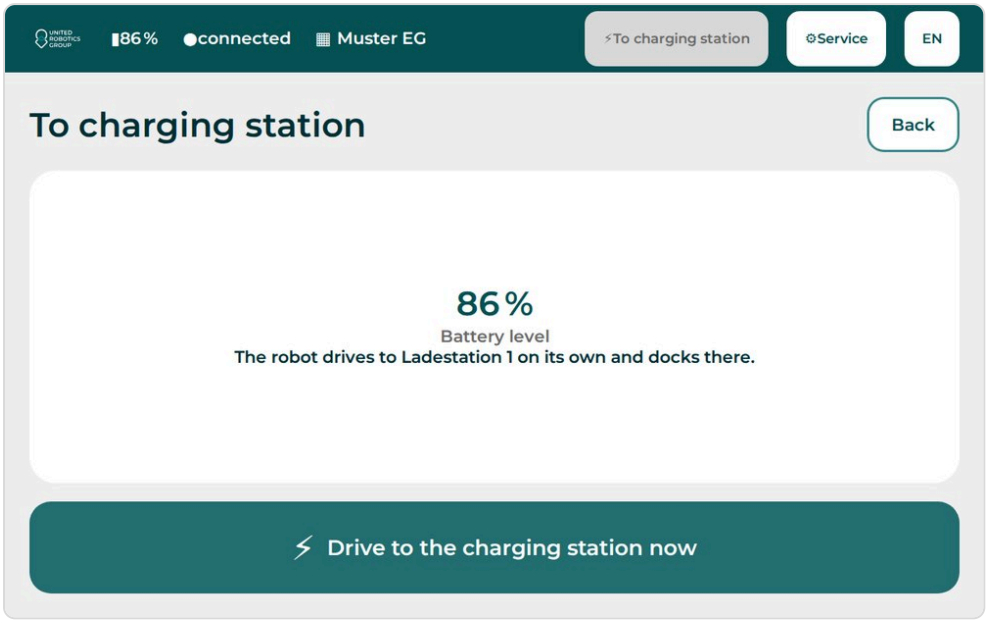
The locker body has an on/off switch of its own. It sits at the back of the body head. With it switched on, the 7-inch screen responds to a touch and shows the home page for releasing the containers.

The charging station

The indicator light at the top right of the charging station shows its state.

Blue	The charging station is starting up.
Red	The charging station is switched on, the robot is not docked.
Green	The robot is docked and charging.

The charging station is connected to an ordinary 220 V socket. A charging cable for manual charging is located on the back. If charging repeatedly fails, measure the open-circuit voltage of the socket with suitable equipment.



The robot is on the charging station and can be sent out from there.

Emergency stop

In an emergency press the red button on top of the robot. The robot stops immediately and enters the emergency stop state; the wheels are then released and the robot can be pushed by hand. To release it, turn the button in the direction of the printed arrows.

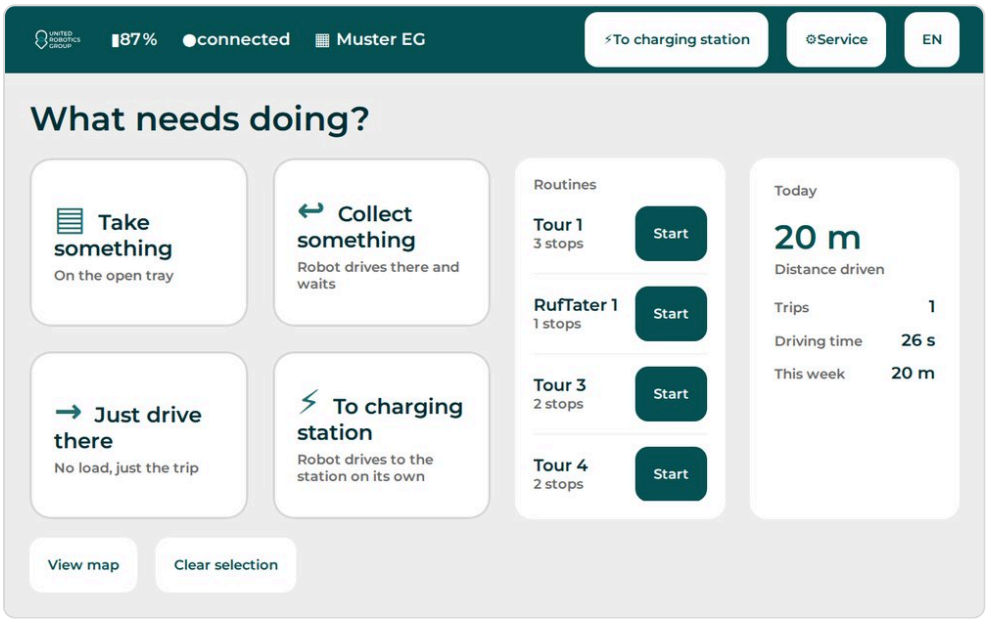
> **AFTER RELEASING THE EMERGENCY STOP**
> If the robot was pushed while in the emergency stop state, it no longer knows for certain where it is. It reports this on the screen and has to be located again. How to do that is described in the chapter on the technician page.

4 Operation on the screen (uGo)

uGo is our application on the screen at the robot. It has two sides: the **operator side** for day-to-day work, which anyone may use, and the **technician side** for setting up, which is protected by a service password. The illustrations in this chapter show the operator side at the resolution of the screen at the robot.

Reading the status bar

The bar along the top appears on every page and answers the three questions that come first in daily work: is there enough battery, is the connection to the chassis up, and which map is the robot working on. To its right sit the shortcut to the charging station and the language selector.

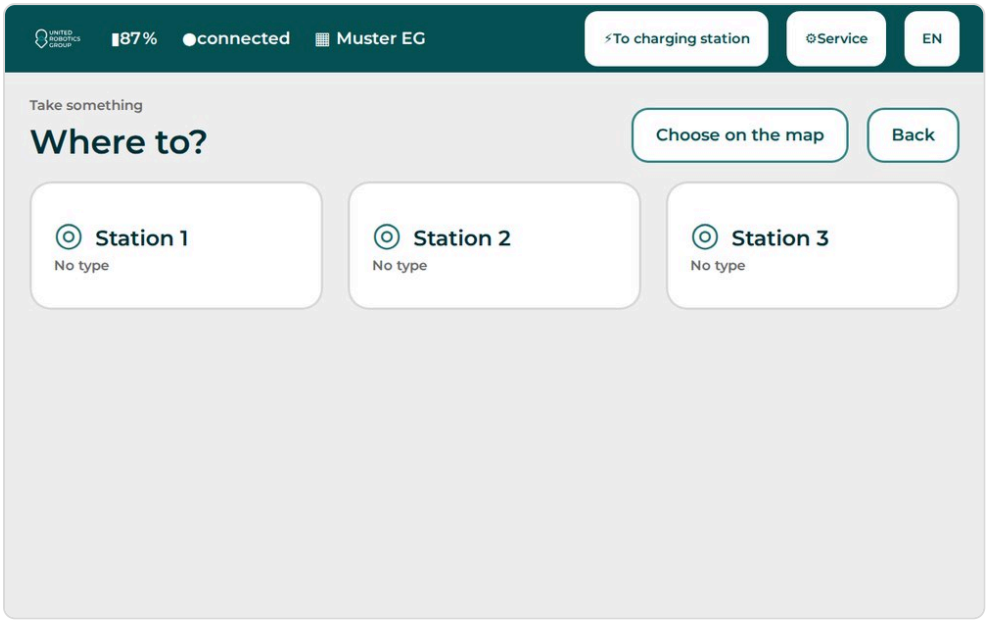


The home screen with the status bar. On the left battery, connection and the loaded map; on the right the shortcut to the charging station and the language selector.

Issuing a job

The home screen asks what is to be done. Which tiles appear depends on how the robot is built – a unit without a tray does not show the tile for bringing something.

1. **Choose the kind of job.** Bring something, collect something, just drive there, or go to the charging station.
2. **Choose the destination.** The robot shows the stations of the loaded map.
3. **Confirm.** The robot sets off and switches to the journey page.



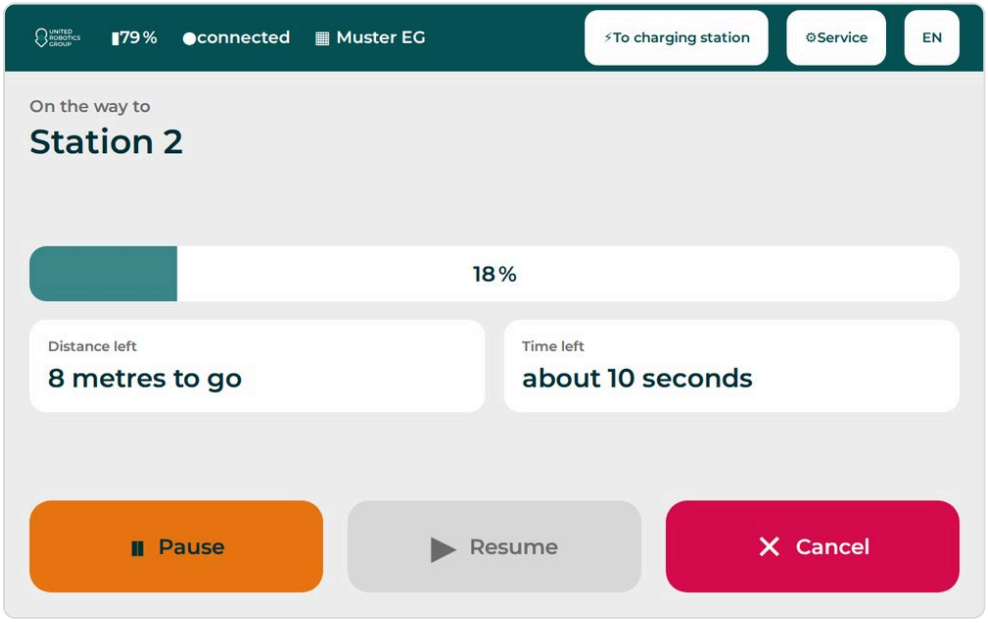
Once the kind of job is chosen, uGo shows the stations of the loaded map.

HOW YOU KNOW IT WORKED

How you know it worked: the journey page appears with the destination name, a progress bar, the remaining distance and the remaining time.

During the journey

The journey page shows where the robot is heading and how far it still has to go. Three buttons are available: **Pause** halts the journey and allows it to be continued, **Continue** resumes it, **Cancel** ends the job.



The journey page: destination, progress, remaining distance and remaining time.

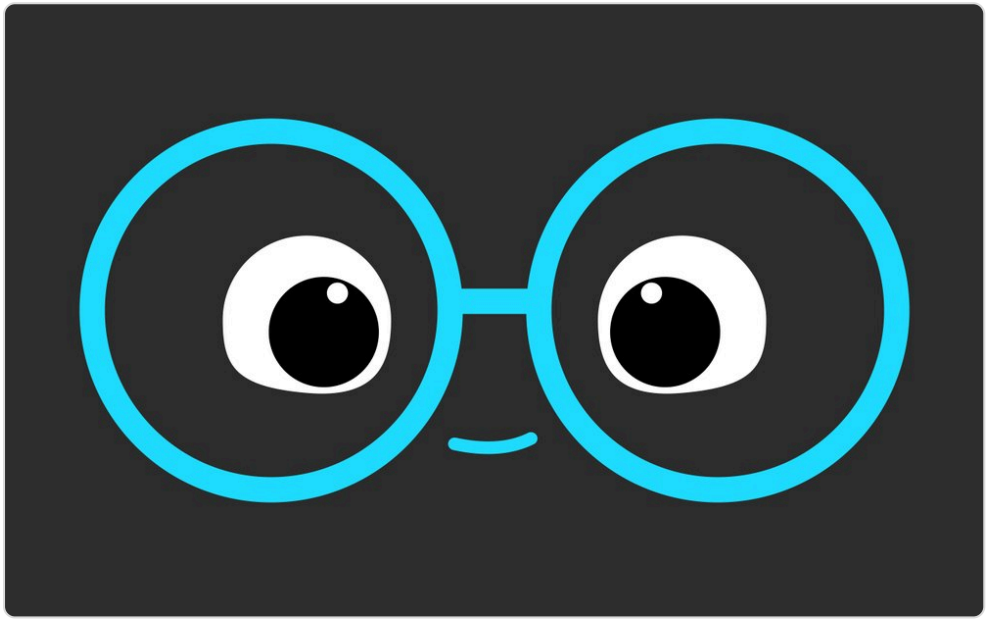
PAUSE IS NOT EMERGENCY STOP

Pause brings the robot to a controlled halt and keeps the destination. The emergency stop disconnects the drives and discards the job. For anything that is not an emergency the rule is: pause first, then act.

The face

As soon as the robot sets off, and whenever nobody has operated it for a while, the face takes over the whole screen. That is intended: a robot driving down a corridor should look approachable and not like a screen with a progress bar. The face watches what the robot does – it smiles when a job is accepted, and the eyes follow when it turns.

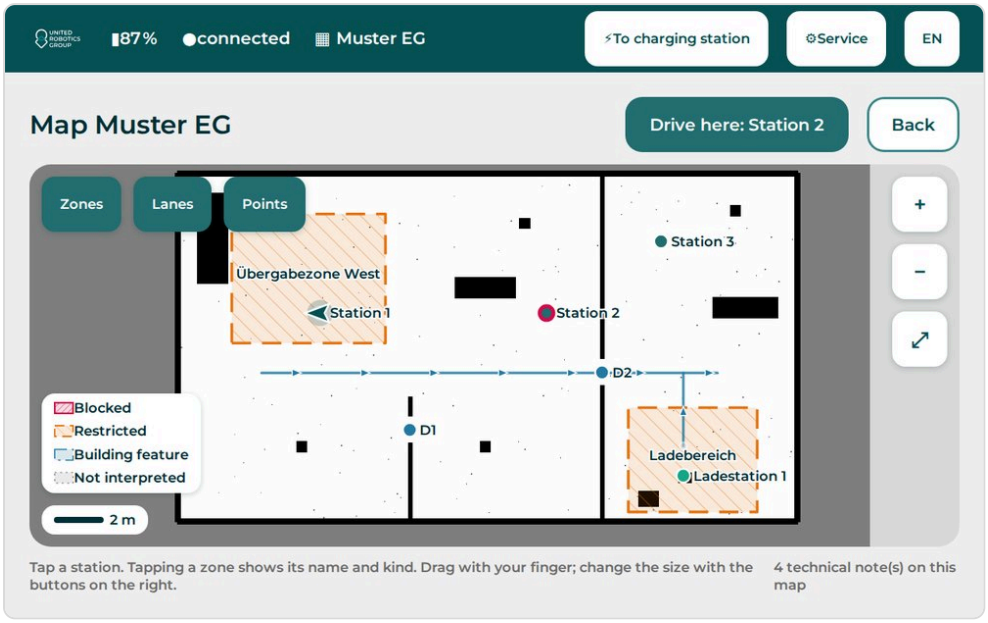
Touching the screen brings the controls back. The journey page with progress and remaining time is then shown again. This is the single most frequently asked question in daily work: the robot has not crashed, it is only looking.



During the journey and at rest the robot shows its face. Touching the screen brings the controls back.

Looking at the map

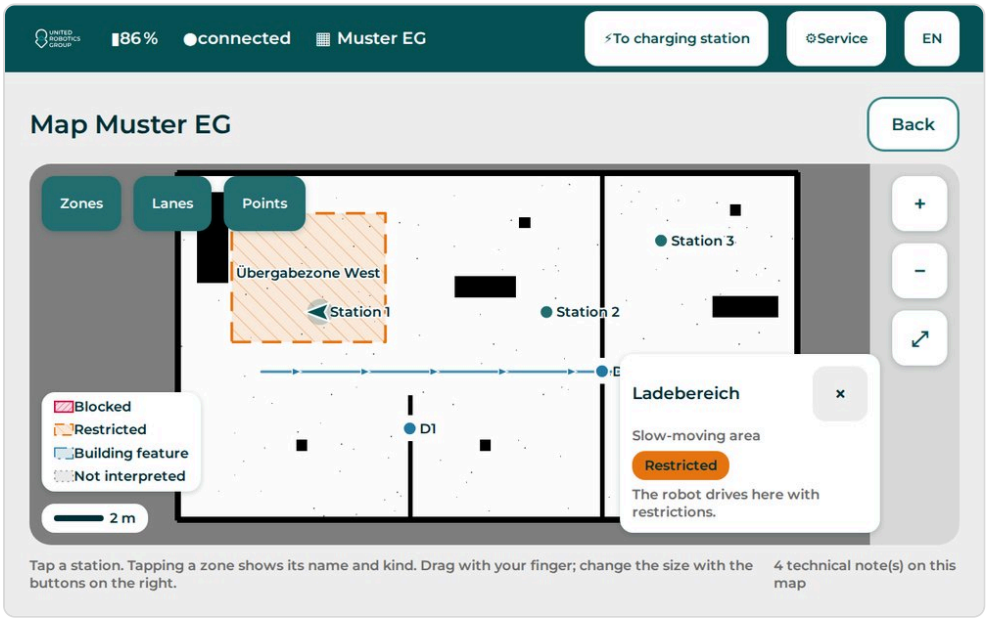
The map view shows the floor plan, the stations and the point where the robot currently stands. Tap a station to see its name and orientation. The view is for looking; the map itself is changed on the technician side.



The map view with its stations. A station that is tapped shows its name and orientation.

Zones on the map

Areas on the map are coloured according to their meaning: the robot must not enter blocking zones, it drives more slowly through slow zones, and functional zones belong to a task such as charging. If a robot regularly stops at the same place, the zones are the first thing to look at.



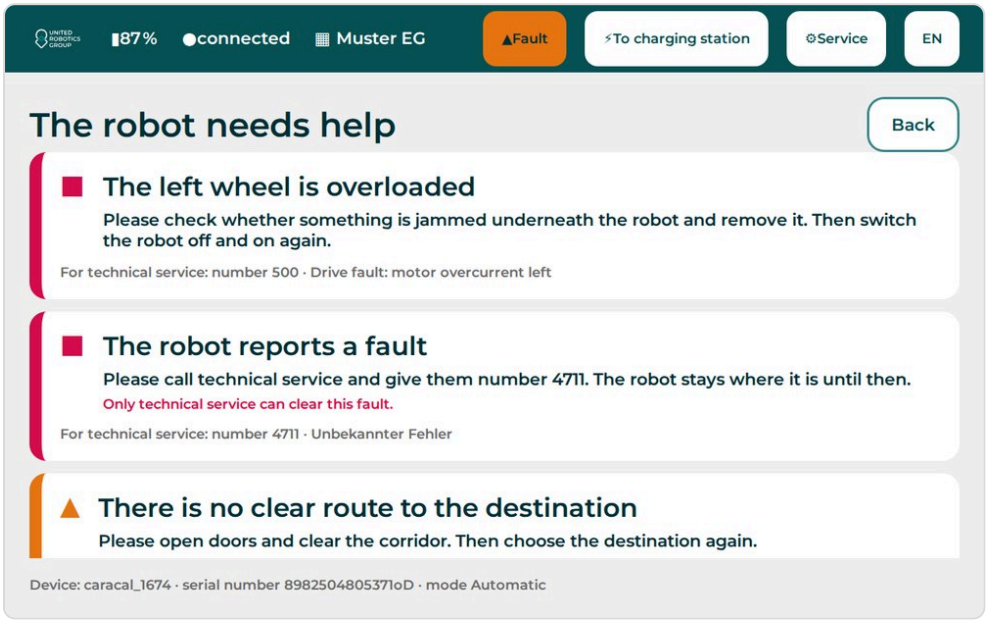
Zones are coloured according to their meaning.

Sending the robot to the charging station

The robot drives to the charging station by itself when the battery runs low. You can send it there at any time using the tile or the shortcut in the status bar. When it is on the station, the page shows the charge level and lets you send it out again.

When the robot reports a fault

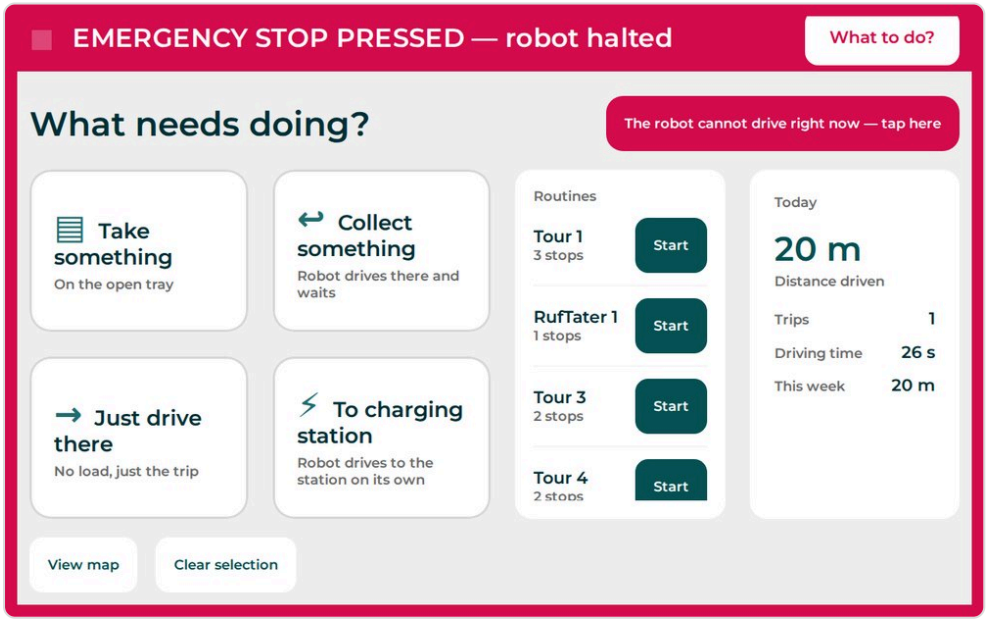
When the robot reports a fault, the screen names it in plain language and says what to do. You can clear the most common cases yourself: remove an obstacle, release the emergency stop, locate the robot again. If the message persists after the second attempt, it belongs in a case in the uSuite.



A fault message in plain language, with a note on what to do.

Emergency stop on the screen

While the emergency stop is pressed, the screen says so explicitly and points out that the wheels are released. Only once the button has been released does the robot accept jobs again.

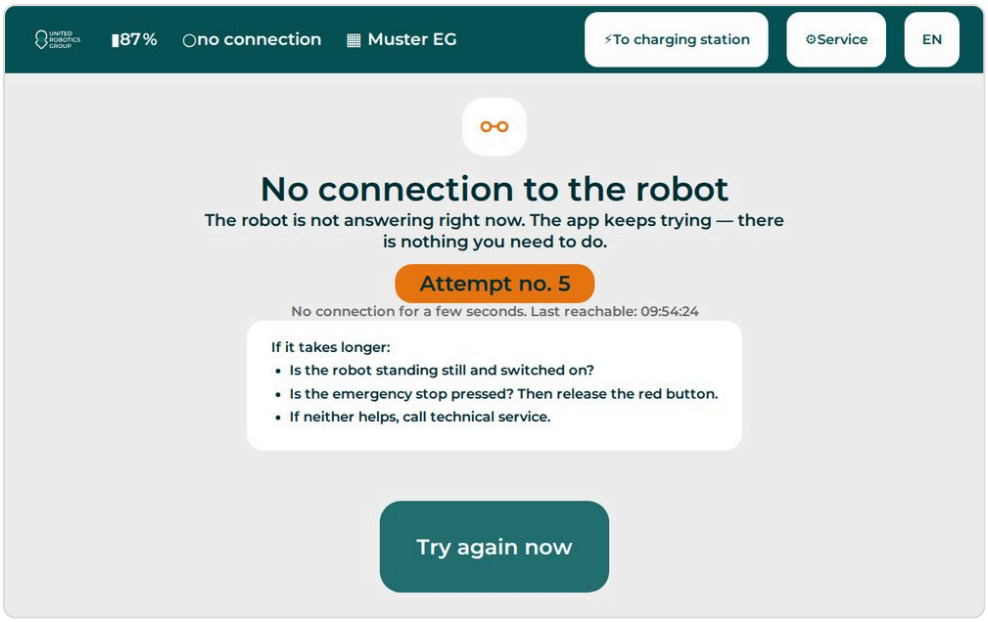


While the emergency stop is pressed, the screen says so explicitly.

When the connection is missing

If the connection between screen and chassis breaks, uGo says so openly and shows since when. The screen does not invent values while it hears nothing. If the connection breaks during a journey, the robot

stops and waits until it is back.



Without a connection to the chassis, uGo shows since when it has been missing instead of carrying on with old values.

5 Containers and locking

The body has two containers with electronic locks: an upper one and a lower one. Both stay locked all the way. A container is opened only at the screen of the body, with an NFC card or a QR code that is registered in the unit.

Cards and codes

Eight NFC cards are part of the delivery: four for the upper and four for the lower container. A card of the upper container does not open the lower one. Instead of a card a QR code can be used; what is registered is the plain text the code carries. QR codes with plain text content can be created with any QR code generator.

Opening a container

1. **Wake the screen.** Touch the 7-inch screen on the locker body. The home page appears.
2. **Present card or code.** Hold the NFC card or the QR code against the reader next to the screen.
3. **Take out.** The door of the corresponding container opens. Take out the contents.
4. **Close the door.** Close the door after removal. Only then is the transaction complete and the container locked again.

Loading

Loading works the same way: open the container, put the goods in, close the door. With the door closed the lock engages again. The rated load of 50 kg and the volume of up to 110 litres apply to the body as a whole.

Managing cards and codes

Which cards and codes a container accepts is held in a list in the unit. You maintain this list at the screen of the body.

1. **Open the list.** On the home page hold the QR code carrying the plain text ADDTAG against the reader. The list of valid NFC cards and QR codes appears.
2. **Add an entry.** Tap “+”. The left button belongs to the upper container, the right one to the lower.
3. **Read in card or code.** Hold the new card or the new code against the reader. For an NFC card a series of numbers appears, for a QR code the text it carries.
4. **Save.** “Apply” accepts the edited list, “Cancel” discards the change.

THE LIST DECIDES WHO MAY OPEN

Every card and every code in the list opens the container it belongs to. Hand out cards only to people who are allowed to receive the contents, and remove lost cards from the list. Keep the list in such a way that you can say at any time who is able to open.

6 Handover to the recipient

A handover with uLog Locker runs in seven steps. The first three are done by the person sending, the last three by the person receiving.

1. **Load.** Open the container at the screen of the body, put the goods in, close the door. The container is locked.
2. **Issue the job.** Choose the destination at the screen of the column and confirm (chapter 4).
3. **Journey.** The robot drives to the destination. The containers stay locked all the way.
4. **Arrival.** At the destination the robot halts and waits. If the screen of the column shows the face, a touch brings the controls back.
5. **Release.** The authorised person touches the screen of the locker body and holds their NFC card or QR code against the reader.
6. **Take out.** The door of the corresponding container opens. The contents are taken out.
7. **Complete.** The door is closed. That completes the transaction and locks the container again. The next job can then be issued, or the robot sent to the charging station.

LOCKED UNTIL HANDOVER

Between closing the door when loading and presenting a valid card at the destination the container stays locked. The unit opens no container by itself.

7 Inspection and maintenance

Regular maintenance keeps the robot available, extends its service life and reveals problems before they turn into downtime. The visual check belongs in the daily routine; the remaining work once a month.

Visual check	Check the housing for damage, scratches and deformation, and that nothing foreign is attached. Check that the emergency stop button, the collision protection and the remaining safety devices are intact and effective.
Wheels	Regularly clean hair, dust and grease from the drive and castor wheels. Check them for wear and damage and replace them where necessary.
Laser scanner and sensors	Dust the laser scanner carefully. Do not rub hard and do not use corrosive cleaners – both impair measuring accuracy. Check the remaining sensors for cleanliness and function.
Charging system	Check the charging station and the charging interface for oxidation, damage and loose fit. Check the station's output voltage and current against the specification; an unstable charging voltage damages the battery.
Cleaning the outside	Wipe the outer surfaces with a soft, lint-free cloth and a neutral cleaner. Do not use corrosive agents or hard objects. Take care not to cover sensors, cameras and the laser scanner while cleaning.
Battery	Charge as specified by us and avoid overcharging and deep discharge. Check the charge level regularly so that charging happens in good time.
Wearing parts	Replace heavily worn parts such as wheels and bumper strips promptly.
Doors and locks	Check that both doors close easily and lock securely. Keep the door area clear of objects. Never force a locked door open.
Reader and screen of the body	Wipe the 7-inch screen and the surface of the NFC and QR code reader with a soft, lint-free cloth. No corrosive agents.
Container interior	Clean the interior after transporting soiling goods. Use a soft cloth and a neutral cleaner.
Cards and codes	Check the list of registered NFC cards and QR codes regularly and remove what is no longer needed (chapter 5).

QUALIFIED PERSONNEL ONLY

Work on the motor and drive, inspection of internal assemblies, cables and connectors, internal cleaning and hardware upgrades are reserved for qualified personnel. If unusual noise or overheating occurs at the motor, stop the robot immediately and contact service.

SOFTWARE

The robot fetches its updates through the uSuite by itself, at the charging station. You do not have to install anything. If units behave differently from one another, check in the uSuite whether they are all on the same version.

8 Faults

Observation	What to do
The robot will not switch on	Switch on the main switch underneath first, then the power button above the chassis.
The robot will not charge	Check that the charging station's mains cable is plugged in and that the station has power. Check that the robot's charging contacts make proper contact. Check that the robot's main switch is on.
No network connection	The Wi-Fi or mobile signal is too weak. Check that the robot is within coverage and restore the connection in the settings.
Localisation is lost	Push the robot to the charging station and locate it there again. The charging station is the most reliable reference because its position on the map is fixed.
The robot cannot get past	Clear temporary obstacles in front of the robot and at the destination and continue the job. If that does not help, restart the robot.
A job is aborted	Follow the note on the screen, clear the stated cause and issue the job again.
The robot does not move	The emergency stop is pressed – turn it out in the direction of the arrows. After switching off, check whether dirt or hair has wrapped around the wheels. If localisation is lost, locate the robot again at the charging station.
The robot always stops at the same place	Check in the map view whether a blocking or slow zone lies there, and check that the passage meets the minimum width from the technical data.
The screen on the locker body stays dark	Touch the screen — it wakes on touch. If it stays dark, check the on/off switch at the back of the body head.
The card or code opens no container	Check whether the card or the code is registered in the list of the unit, and whether it belongs to the right container: cards of the upper container do not open the lower one (chapter 5).
The transaction is not completed	Close the door of the container. The transaction counts as complete only with the door closed.

9 Technical data

All figures are taken from the data sheet of edition 2.0. What counts is always the unit as delivered; if your equipment differs, the delivery note applies.

Locker body

Container dimensions L×W×H (mm)	600×438×875
Container volume	up to 110 litres
Rated load (kg)	50
Weight of the body (kg)	50
Screen of the body	7 inches, 1024×600
Material	stainless steel and PLA
Colour	signal white glossy, anthracite grey matt
Protection class	IP44
Operating temperature	−10 °C to +65 °C, UV and corrosion resistant
Charging temperature	+5 °C to +45 °C, indoors
Storage temperature	−20 °C to +65 °C
Place of use	indoors

Driving and navigation

Method	SLAM – simultaneous localisation and mapping
Modes	free, track-guided, mixed, following
Localisation accuracy	±5 mm / ±1°
Maximum speed	1.2 m/s, adjustable from 0.3 m/s
Gradient	up to 8°
Threshold	up to 20 mm high, gap up to 35 mm
Map size	no fixed limit, up to 200,000 m² per map recommended

Chassis and operating environment

Place of use	indoors and suitable outdoor areas on a paved surface
Floor coverings	short-pile carpet, cement, wood, marble and comparable coverings
Operating temperature	−10 °C to +65 °C
Charging temperature	+5 °C to +40 °C, indoors
Storage temperature	−20 °C to +65 °C
Protection class	unit IP43, battery IP66

Charging and network connection

Charging method	wireless, fully automatic at the charging station
Dimensions of the station	375 × 160 × 355 mm
Weight of the station	4.35 kg
Input voltage	100 to 240 V, 50 to 60 Hz
Output voltage	29.4 V, 7.0 A
WLAN	2.4 and 5 GHz, 802.11 a/b/g/n/ac
Mobile network	optionally via SIM
Bluetooth	5.0 BLE
To the uSuite	outgoing 443 (TCP), no incoming rule
Without internet	jobs, maps and tours continue locally

Software level of this edition

uGo	1.0.8
Kiosk	1.0.3
network guard (Netzschranke)	1.1.9

Conformity

Product safety	Machinery Directive; ISO 12100, ISO 13849, ISO 13850, IEC 60204-1, ISO 3691-4
Electromagnetic compatibility	EN IEC 62196, IEC 61000-6-2, IEC 61000-6-4
Radio	ETSI EN 489-1, 489-17, 489-52; ETSI EN 300 238; ETSI EN 301 908-1 and 908-13; EN IEC 62311:2020; EN 1175
Hazardous substances	DIN EN IEC 62321
Battery	UN 38.3
Charger	Low Voltage Directive

The unit as delivered always takes precedence. Where your configuration differs from the table, the delivery note applies.

10 Contact and support

The uSuite shows your units, carries the cases and holds the unit file. This manual sits there as well, always in its current edition.

The uSuite is our cloud. It shows your units, carries the cases and holds the unit file. Access is granted; there is deliberately no self-registration. Request it through your contact or through service.

Fleet	All units of your organisation with state, battery, last report and location. A unit that stops reporting stands out here before anybody misses it.
Cases	A fault becomes a case with a number, a deadline and an owner. You see the history, can add notes and can close the case when it is done.
Unit file	Manuals, quick guides, test records and reports sit with the unit and with the unit type. You will find this manual there too, always in its current edition.
Maps	The floor plan lives in the cloud, not only on the robot. When a unit is replaced, the new one retrieves the state of the site instead of somebody re-teaching it.
Updates	The robot fetches its own update, at the charging station and never in the middle of a job. If it does not come back up healthy within a minute, it returns to the previous version by itself and reports that.
Remote support	No unit listens on the internet. The connection is opened from the inside out, only during a support session, and it can only read. For your IT department the whole sentence is: outbound 443, nothing else.

WHERE YOUR DATA SITS

The uSuite is operated in Europe, data centre Frankfurt. You see your organisation; we see no more than we need for service – and what we see is stated in the application, not in a contract annexe.

CONTACT

Service and faults: support@unitedrobotics.group
Sales and enquiries: health@unitedrobotics.group
Extensions: through your contact or through the uSuite