

Smart Logistics Hub

Multifunctional Locker System for Mail and Intralogistics Applications



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Contact

The contact information for questions regarding this product or for general inquiries is listed below.

Contact address of manufacturer

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Bundesstraße 12
6714 Nüziders, Austria
www.gantner.com/locations

Important Information

Dear customer,

Our aim is to ensure that our product operates with safety and to your complete satisfaction. To achieve this aim, please take this opportunity to familiarize yourself with the following guidelines.

- Pay attention to the safety messages in this manual. The messages are indicated by the signal words "DANGER", "WARNING", or "CAUTION", and inform you about hazardous situations and how to avoid them.
- Pay attention to messages indicated by the "NOTICE" signal word. These messages include important information for avoiding property damage.
- Pay attention to the symbols and safety messages on the product.
- Read all instructions in this manual carefully before installing or operating the product.
- Where not otherwise specifically documented, the appropriate installation, commissioning, operation, and maintenance of the product is the customer's responsibility.
- Keep this manual in a safe place for quick reference.

Notation of safety information and safety symbols

This manual includes important safety messages and symbols intended to inform the user about potentially hazardous situations or important information for the safe and proper use of the described product(s). The safety messages also include directives on how to avoid hazardous situations. These safety messages and directives must be read and observed.

The structure of the safety messages and the meaning of the symbols used in this manual are described in this section.

1. Safety messages for personal injury

Personal safety messages contain a signal word, describe the nature of the hazard, and indicate how to avoid the hazard.



The safety alert symbol used without a signal word always precedes important safety information that must be read carefully, and the instructions carefully observed. Not doing so may cause personal injury.

Format of safety messages that apply to an entire section:

These safety messages may be used with or without a symbol.

CAUTION



Electrical shock

- Touching current-conducting parts may result in injury due to electrical shock.
- Do not remove safety protection and covers.
 - Do not touch the electrical connections while power is being supplied.

Format of safety messages that are embedded in text and apply to a specific point:

CAUTION! **Electrical shock.** Never remove safety protection and covers. Do not touch the electrical connections while power is being supplied.

2. Property damage messages

Property damage messages are used to describe potentially hazardous situations that may lead to property damage. These messages have the same layout as safety messages but use the signal word "NOTICE" instead of "CAUTION".

Format of property damage messages that apply to an entire section:

NOTICE

Risk of damage to the device and connected devices

Risk of malfunction

- Read the following instructions carefully before installing the device.
- Always adhere to the instructions.

Format of property damage messages that are embedded in text and apply to a specific point:

NOTE! Risk of damage to the device and connected devices. Read the following instructions carefully before installing the device.

3. Definition of the signal words

	Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.
	Indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

4. Definition of the safety symbols

	Caution: General Information This symbol indicates general warnings or cautions that are not related to a particular type of hazard.
	Caution: Electrical Shock This symbol indicates warnings related to electrical hazards (danger due to high voltage).
	Prohibited: Do Not Disassemble This symbol indicates warnings about not disassembling certain components or equipment. Disassembling may lead to damage or malfunction of the device.
	Mandatory Action: General Information This symbol indicates general information that must be read and followed before proceeding with the accompanying instructions.
	Mandatory Action: Read Instructions This symbol indicates information referring to an important description in the manual, or other documentation, which must be read and followed.

⚠ Important Safety Information ⚠



- The installation, commissioning, and servicing of our products must be performed only by suitably trained personnel. In particular, electrical connections must only be made by correspondingly qualified specialists. Always observe the relevant installation regulations in accordance with the national Electrical Engineers Association.

→ Unqualified personnel may potentially perform actions that result in injury due to electrical shock.



- Where not otherwise stated, installation and maintenance work on our products must be carried out when disconnected from the power supply. This applies in particular to appliances that are normally supplied by low-voltage current.

→ If the appliance is not disconnected from power, touching terminals or other internal parts of the appliance may lead to injury due to electrical shock.



- It is prohibited to alter the products (devices, cabling, etc.).

→ Alterations to the products may subsequently result in personal injury, property damage, or damage to the products.

- Do not remove protective shields and covers.

→ Removing protective shields and covers may result in personal injury or property damage.

- Do not attempt to repair a product after a defect, failure, or damage is detected. In addition, do not put the product back into operation. In such cases, it is essential to contact your GANTNER representative or the GANTNER support hotline.



- The installation, commissioning, operation, and maintenance of the product must be carried out in accordance with the technical conditions of operation as described in the corresponding documentation. Therefore, it is essential to read the corresponding chapter of this manual and observe the instructions and information therein.

- If there are still some points that are not entirely clear, please do not take a chance. All queries can be clarified by your GANTNER representative or by ringing the GANTNER support hotline.

- Directly on receipt of the goods, inspect both the packaging and the product itself for any signs of damage. Also check that the delivery is complete and includes all accessories, documentation, auxiliary devices, etc.



- If the packaging or product has been damaged in transport, or should you suspect that it may have a fault, the product must not be put into service. Contact your GANTNER representative who will endeavor to resolve the problem as quickly as possible.

- GANTNER Electronic GmbH accepts no responsibility for any injuries or damage caused as a result of improper use.

Although great care is taken and we are continuously aiming for improvement, we cannot completely exclude the possibility of errors appearing in our documentation. GANTNER Electronic GmbH therefore accepts no responsibility for the completeness or accuracy of this manual. The right is reserved to make alterations at any time without prior notice.

Should you discover any fault with the product or in its accompanying documentation, or you have any suggestions for improvement, you may confidently inform your GANTNER representative or GANTNER Electronic GmbH directly.

We especially look forward to hearing from you if you want to let us know that everything is functioning perfectly.

The GAT SMART.Lock 7000 System was developed and manufactured under the quality management standard ISO 9001 and GANTNER Electronic GmbH is also certified according to standard ISO 14001.



This product is in conformity with the following EC directives, including all applicable amendments:

- 2014/53/EU (Radio Equipment Directive)

The full text of the CE Declaration of Conformity is available online at the following Internet address:

https://www.gantner.com/downloads-GATSMARTLock_w77PL0i3Px



GANTNER is committed to meeting or exceeding the requirements of the RoHS directive (2011/65/EU). The RoHS directive requires that manufacturers eliminate or minimize the use of lead, mercury, hexavalent chromium, cadmium, polybrominated biphenyls and polybrominated diphenyl ethers in electrical and electronic equipment sold in the EU after July 1, 2006.



The WEEE symbol on GANTNER products and their packaging indicates that the corresponding material must not be disposed of with normal household waste. Instead such marked waste equipment must be disposed of by handing it over to a designated electronic waste recycling facility. Separating and recycling this waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. Please contact your local authority for further details of your nearest electronic waste recycling facility.



FCC INFORMATION (U.S.A.)

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that of which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Warning Statement:

[Any] changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Compliance Statement

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions: (1) this device must not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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1 INTRODUCTION

1.1 About this manual

The Smart Logistics Hub system consists essentially of the boxes, which can be arranged in a wide variety of formations, the electronic locks that lock and unlock the boxes, the associated controllers that control the locks, and the central terminal with touchscreen and software applications via which operation occurs. Furthermore, a cloud solution is part of the system via which several locker systems and controllers can be integrated, configured, and managed.

This manual contains a detailed description of the components of the Smart Logistics Hub. A separate manual is available for the GAT SMART.Lock 7000 locks and controllers. While many different applications and designs are possible, e.g., for the boxes themselves, the basics are described here in order to manufacture or install them accordingly. This manual provides the technician, who is responsible for carrying out the installation, configuration, and commissioning of the system, with all the necessary information. In addition, the operation of the system by the system operators and the end users is also described.

1.2 Chapter overview

In chapter "2. GENERAL INFORMATION" you will find the functional description of the Smart Logistics Hub system, an overview of the system components, and a description of the most important terms used in this manual.

In chapter "3. INSTALLATION" you will find the installation instructions for the central terminal, i.e., how to mount the central terminal into a box. The installation of the controller and locks is explained in general here with detailed installation information provided in the GAT SMART.Lock 7000 system manual.

Chapter "4. ELECTRICAL CONNECTION" describes the connection of the power supply, the network, and the controllers and locks to the central terminal.

In chapter "5. CONFIGURATION" you will find a description of the configuration options and adjustable parameters for the Smart Logistics Hub and the Postbox and Intralogistics applications.

In chapter "6. OPERATION" you will find the operating instructions for users of the Smart Logistics Hub.

Chapter "7. TECHNICAL DATA" contains the technical data of the central terminal.

1.3 Target groups

This manual contains the necessary information for the installation, commissioning, configuration, and operation of the Smart Logistics Hub. It also describes the operation on the central terminal and in the VC cloud. The information is intended for system integrators as well as the technicians who install and commission the components of the Smart Logistics Hub. If a chapter is only intended for a specific target group, this is indicated at the beginning of the chapter. The following target groups will find information in this manual:

- Technicians (assembly, installation, configuration)
- Service technicians (configuration, operation)
- User of the equipment (operation)

If the target group is not specifically stated, the information is intended for all target groups.

⚠ CAUTION! Injury and damage to property/equipment. The activities that are intended for a specific target group according to this manual may only be performed by this target group. Performing the activities by unqualified personnel can lead to injuries or damage to property/equipment.

1.4 Formatting

1.4.1 Safety-critical information

The following formatting (with example text) is used in this manual to display important, safety-critical information that must be read and followed.

NOTE! Following on from this signal word in the manual is a reference text that must be read and followed. The reference text contains important information. Non-observance can lead to damage the device or associated equipment.

1.4.2 Non-safety-critical information

The following formatting (with example text) is used in this manual to display important, but not safety-critical information.

i The text accompanying this symbol contains interesting information relevant to the current chapter. You do not necessarily need to read this text; however, it will help you to understand the information in the section or provide interesting tips for the described device or the operation of the software.

1.4.3 Instructions and results

Instructions, which must be completed by the reader, and the results of these instructions are formatted as follows.

- This symbol represents an action or instruction that must be followed.
 - This symbol represents the result after completing the previous instruction.

1.5 Contact & inquiries

If you have any questions concerning the Smart Logistics Hub and the GAT SMART.Lock 7000 locks and controllers, please contact your local sales partner or one of the GANTNER branch offices directly. The contact details are available via the following link: www.gantner.com/locations

2 GENERAL INFORMATION

2.1 Intended use

The Smart Logistics Hub is used for receiving and sending physical shipments (letters, parcels, devices, mail, etc.). The process is carried out largely autonomously by the operating personnel and end users on a central terminal with touchscreen.

Various applications can run on the central terminal, covering different areas of application. The following applications are intended and described in this manual:

- Postbox (sending and receiving mail in offices)
- Intralogistics (management of deliveries in companies)

The areas of application for the Smart Logistics Hub are internal mail delivery and dispatch in offices and companies.

2.2 System overview

The following figure shows schematically how a Smart Logistics Hub system is structured.

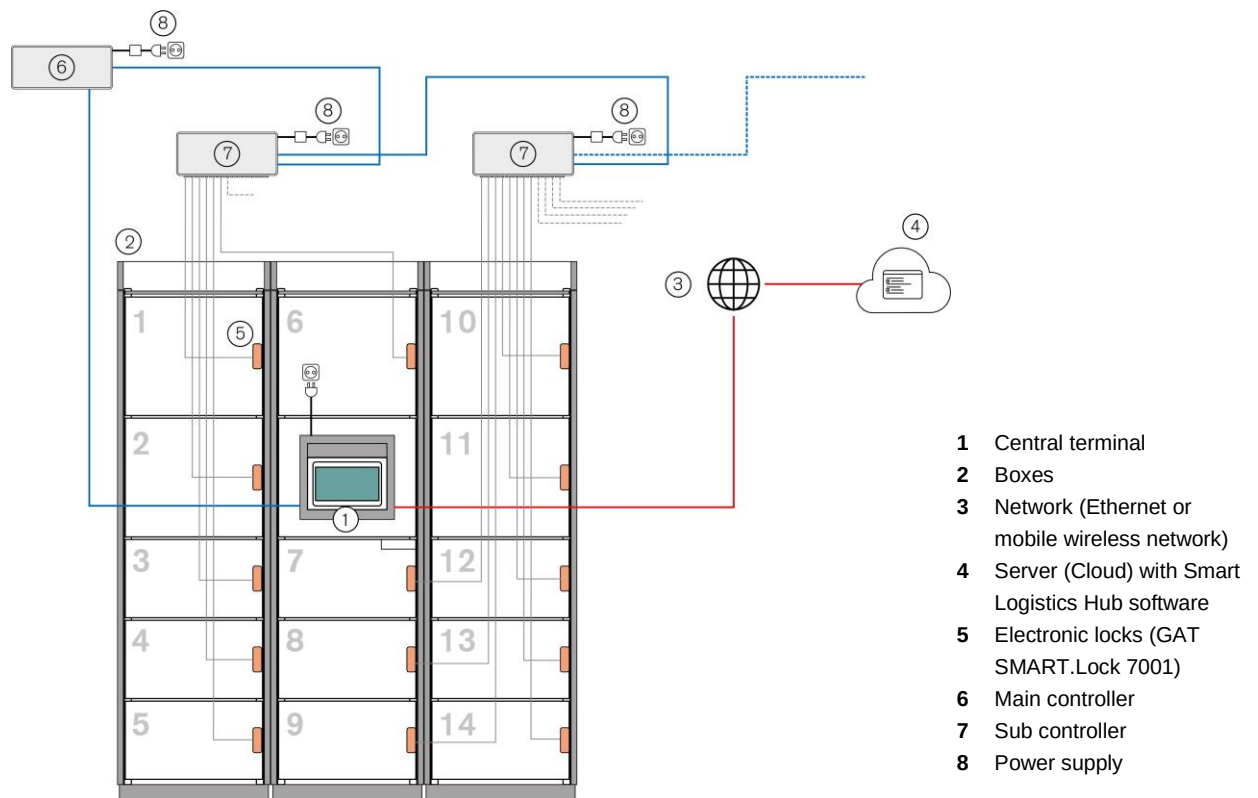


Figure 2.1 – Application example

2.3 Functional description

The system can be configured for a wide variety of use case. For this purpose, the central terminal is integrated in the VC cloud and configured accordingly. A separate application can be executed on the central terminal for each use case. Users can be informed via email or smartphone and select boxes via an online platform. On-site operation takes place directly on the central terminal.

The Smart Logistics Hub can operate with different applications. A separate license is required for each application. The available applications include:

- **Postbox:**
 - Mail and parcel logistics**
Parcel logistics for operation/office
Delivery of a parcel or mail ⇒ Notification of recipient (SMS or email) ⇒ Pickup by recipient using a pickup code ⇒ Confirmation of pickup.
- **Intralogistics:**
 - In-house parcel deliveries**
Parcel logistics for companies/office with the possibility of integration in third-party software via API.
Storage by service employee and confirmation ⇒ Notification of customer (SMS, email, or app) ⇒ Pickup by customer.

Users are notified via email regarding delivery items that concern them. For the pickup of a parcel, the email contains a PIN code and/or barcode or QR code. With this information, the user can identify themselves on-site. The users are created and managed in the system. There, the email address and other data can be inserted and edited for each user.

2.4 Terminology

Some terms are used frequently in this manual and these are defined below.

Central terminal

The touchscreen terminal integrated in the cube that is used for on-site operation.

Main and sub controllers

Controllers connected to the central terminal that control the electronic locks in the boxes via cable connection to unlock or lock the box door. A main controller is connected directly to the central terminal. Several sub controllers can then be connected to this main controller. Furthermore, 24 locks can be connected to each sub controller.

Lock

General term for an electronic lock installed in a box. The lock described here has the designation GAT SMART.Lock 7001.

Box

Designation for a locker that is locked and unlocked with an electronic lock and is used for sending and receiving. Different types of boxes are available.

Cube

A locally delineated installation of boxes that are managed as a unit are referred to as a "cube", e.g., in the Postbox and Intralogistics applications.

Operator

The people who use the Smart Logistics Hub to send or receive parcels/mail. The users use the central terminal to send and collect parcels.

User / Administrator

The personnel who manage the Smart Logistics Hub. The configuration and administration are carried out via a cloud solution.

Tenant

Tenant in the cloud refers to a customer of the Smart Logistics Hub who uses boxes within the system. Users and operators must be assigned to tenants. This ensures that the tenants are separated in the VC Cloud. Each tenant can only view their own assets and users.

Plan

The use of plans is optional. For each plan, certain functions and settings, e.g., price per month or transaction fees, can be defined and the plans are assigned to the tenants. One or more plans can then be activated for users, and these determine the available functions.

VC Cloud

Central software installation on the VC server. Users and operators can log in here using a web browser and access data (username and password) to configure and operate the system.

Reader

An optional reader for barcode and QR code as well as a reader for barcode, QR code, and wireless (NFC) are available, which are connected to the central terminal via USB. These readers can then be used to identify users on-site.

2.5 Ordering guide

For the planning and ordering of your Smart Logistics Hub system, an ordering guide is available to download from the GANTNER website.

Smart Logistics Hub Ordering Guide

Step-by-step guide to configuring and ordering your personalized Smart Logistics Hub.

Select your SLH system
POBox or Intralogistics?

1

POBOX INTRA

Select connection
LAN or LTE connection?

2

LAN LTE

Select terminal
Country? Secondary terminal? Outdoor terminal?

3

Terminal

Select optional accessories
Which optional accessories are required?

4

Accessories

Select quantity of locker locks
How many lockers do you need?

5

Lockers

Smart Logistics Hub Documentation

NOTE! Detailed information about the Smart Logistics Hub is available in the user manual, which can be downloaded from the GANTNER website via the following link:

https://www.gantner.com/downloads-smart-logistics-hub_31qfjbrwt

www.gantner.com

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Connection type

Terminals that do have a LAN depending on the country of operation.

Connection (2GB fair use)

LAN

C

1108058

Secure connection via mobile network fair use in the **European Union**

fee

C

1108057

Secure connection via mobile network fair use in **Switzerland**

fee

SC

1108059

Secure connection via mobile network fair use in the **United States**

fee

C

1108056

Secure connection via mobile network fair use in **Canada**

fee

SC

1108055

Secure connection via mobile network fair use in **Australia**

fee

Accessories

System via the following optional

Accessories	Part No.	Quantity
Reader	109614	
Static Hub reader for linear codes		
Reader mounting	109615	
Bracket for the SLH reader		
12mm wall thickness		
SMS	107127	
SMS messages over the static Hub infrastructure in EU, USA, CA, & AUS		
1-charged quarterly/ at the end of the billing		

Accessories required for the system:

Accessories	Part No.	Quantity
Controller M 7020	1100399	
Controller for controlling max. 8 lockers		
Controller M 7020 Light	1100399	
Controller for controlling max. 3 lockers		
RT Controller S 7020	1101689	
Controller for max. 24 GAT SMART		
1x1 electronic locker locks		
NETPower Plug 1.0 included		

Accessories required for the controllers:

power cord required per power supply.

Accessories	Part No.	Quantity
Power Supply 7020-1 100-	1104784	
Supply for the main controllers (controllers)		
Supply 7020-1 100-240V / V)		
rd EU CH - IEC 60320 C7	404181	
and Swiss electrical outlets		
rd UK - IEC 60320 C7	404282	
electrical outlets		
rd AUS - IEC 60320 C7	1311474	
Italian electrical outlets		
rd USA - IEC 60320 C7	636835	
electrical outlets		
rd IND - IEC 60320 C7	636734	
Indian electrical outlets		
g - optional		
Power Plug 7020		
Part No. 1100027		
Plug for forwarding the power supply to the following sub controller(s)		
Note: 1x plug is included with each sub controller. This part is only shown as a spare part in this list		

Yearly fee

- Includes the cloud service, monitoring, hotfixes & patches, backups, on-going system checks and OS upgrade
- Yearly fee

SLH Intralogistics HM - managed locks fee - GSC

- Part No. 1107894
- Hosting & monitoring for Smart Logistics Hub Rental Intralogistics
- Yearly fee per managed lock

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12.1" touchscreen terminal for EU/US/UK

- Router type EU 2G/3G/4G
- Power plug type F
- 10.1 inch display, 1000 cd/m², UV protected, PCAP touch

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2.6 System components

The central terminal and electronic locks can also be installed in customized boxes. The following system components are available to order individually for this purpose:



1. SLH Indoor Central Terminal
10'' Primary Terminal



2. SLH Indoor Central Terminal
10'' Secondary Terminal



3. GAT SMART.Lock 70x1



6. GAT NET.Controller M 7020 Light
(Main controller)



5. GAT NET.Controller M 7020
(Main controller)



4. GAT SMART.Lock 7001 Bolt Set



7. GAT SMART.Controller S 7020
(Sub controller)



8. GAT NET.Power Supply 7020 100-240V / VI
(Power supply)



9. GAT NET.Power Cord xxx
(Different power supply cables)



10. GAT NET.Lock Cable 5m



11. GAT NET.Lock Cable Extension 3m



12. Ethernet Patch Cable



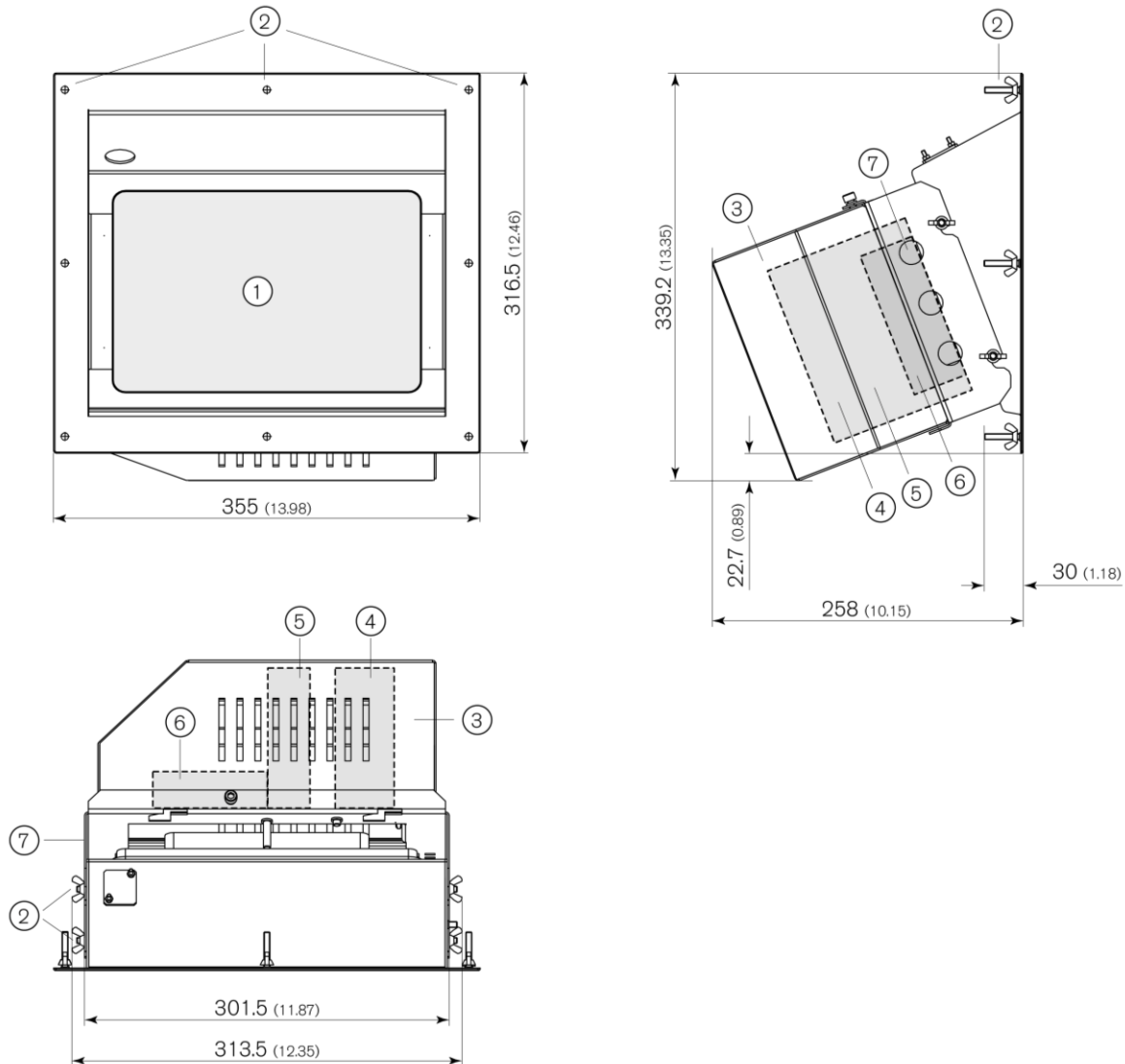
13. Barcode Reader mounting bracket (optional)



14. SLH Barcode Reader (optional)

Figure 2.2 - System components of the Smart Logistics Hub system

2.7 Central terminal



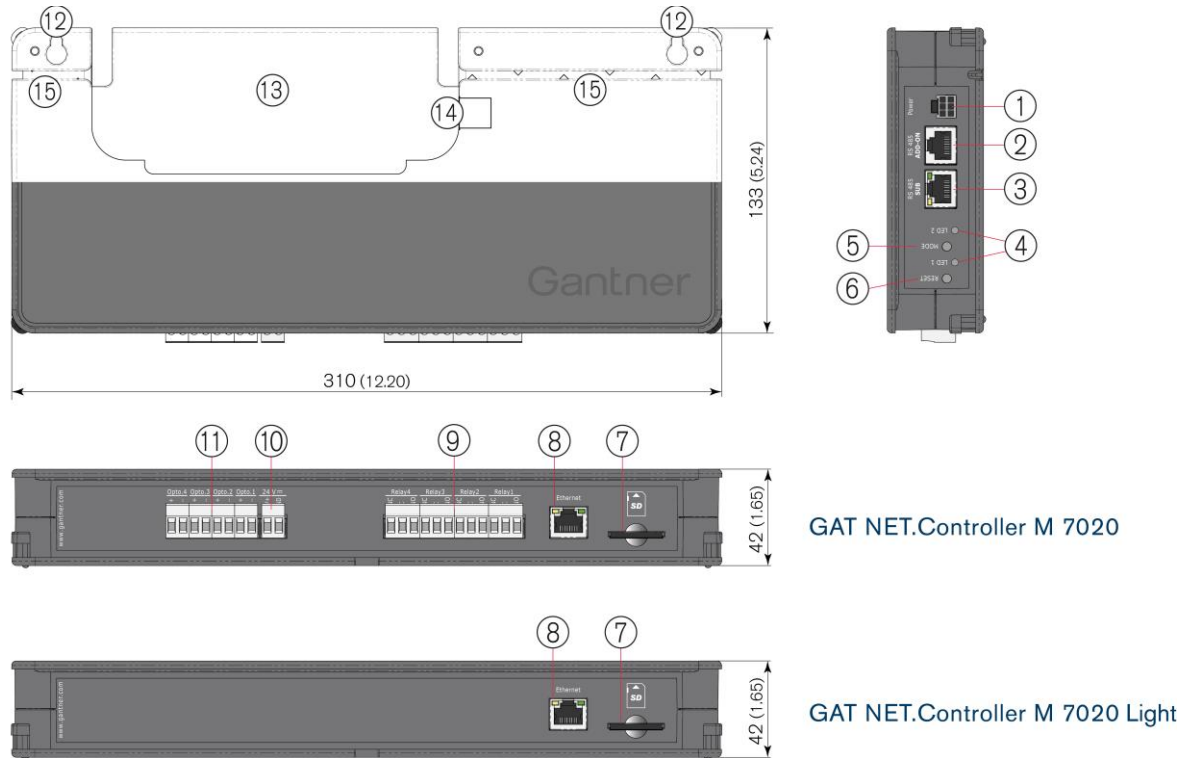
Dimensions in mm (inches in brackets)

- | | |
|-------------------------|---|
| 1 Display (touchscreen) | 5 Control module with lock control (Raspberry Pi) |
| 2 Mounting screws | 6 Router with network interfaces |
| 3 Metal housing | 7 Cable inlets |
| 4 Power supply | |

Figure 2.3 – Features of the central terminal

The central terminal is a compact unit that can be mounted in a locker mounting frame or similar using the mounting screws (2).

2.8 Main und sub controller



GAT NET.Controller M 7020

GAT NET.Controller M 7020 Light

Dimensions in mm (inches in brackets)

- | | | |
|---|---------------------------------|----------------------------------|
| 1 Voltage supply input | 6 RESET button | 11 Optocoupler inputs |
| 2 RS-485 serial interface for sub-devices | 7 SD card slot | 12 Mounting holes |
| 3 RS-485 serial interface for extensions | 8 Ethernet connection (network) | 13 Power supply compartment |
| 4 Status LEDs | 9 Relay outputs | 14 USB connector (optional WLAN) |
| 5 MODE button | 10 Voltage output DC 24 V | 15 Cable holder |

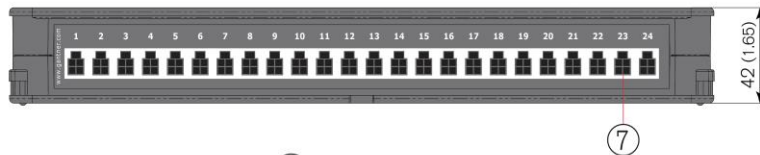
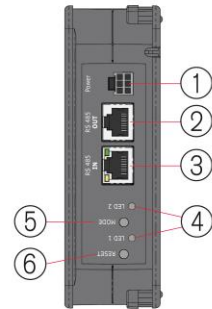
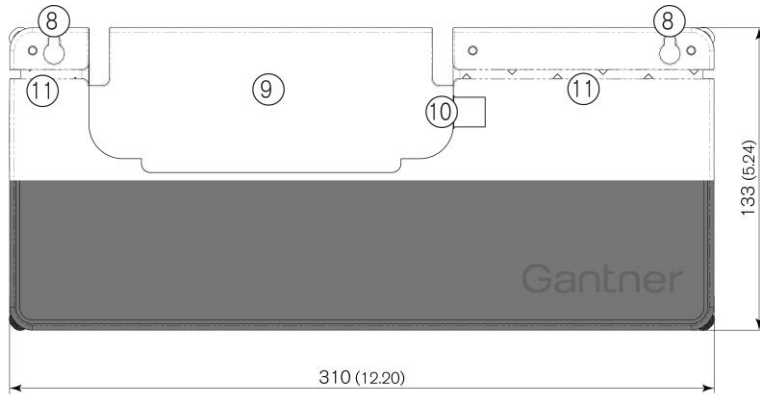
Figure 2.4 – Features of the GAT NET.Controller M 7020 main controller

The GAT NET.Controller M 7020 has removable screw terminals (supplied with the device). Otherwise, there are no individual parts.

The main controller is available in different variants, which also differ optically:

- GAT NET.Controller M 7020: Control of up to 8 sub controllers, additional relay outputs and optocoupler inputs.
- GAT NET.Controller M 7020 Light: Control of up to 3 sub controllers, no relay outputs and optocoupler inputs.

There is a compartment (13) in the housing of the GAT NET.Controller M 7020 in which the power supply can be stored if desired.



GAT NET.Controller S 7020 F/ISO



GAT NET.Controller S 7020 F/ISO Light

Dimensions in mm (inches in brackets)

- | | | |
|---|---|----------------------------------|
| 1 Voltage supply input | 4 Status LEDs | 8 Mounting holes |
| 2 RS-485 serial interface to the next sub controller | 5 MODE button | 9 Power supply compartment |
| 3 RS-485 serial interface to the previous sub controller or main controller | 6 RESET button | 10 USB connector (optional WLAN) |
| | 7 Connections for the GAT SMART.Lock 7020 locks | 11 Cable holder |

Figure 2.5 – Features of the GAT SMART.Controller S 7020 sub controller

The GAT SMART.Controller S 7020 has removable screw terminals, which are supplied. A power connector is also supplied.

The sub controller is available in different variants, which also differ in appearance:

- GAT SMART.Controller S 7020: Control of up to 24 locks
- GAT SMART.Controller S 7020 Light: Control of up to 12 locks

There is a compartment (9) in the housing of the GAT SMART.Controller S 7020 in which the power supply can be stored if desired.

ATTENTION! There is also a GAT NET.Controller S 7020 available, which is identical in appearance. This controller must not be used with the GAT SMART.Lock 7020 locks! Pay attention to the model label!

3 INSTALLATION

⚠ CAUTION



Electric Shock

- ➔ *Touching live power cables may cause injury due to electrical shock.*
 - *Before working on the device or mounting/dismounting, the device must be disconnected from the power supply.*
 - *The applicable safety and accident prevention regulations must be observed.*
 - *Protective devices must not be removed.*
-

NOTICE



Damage to or malfunction of the system components

- ➔ *Improper work on the device can damage the devices.*
 - *Read the information in this chapter carefully before installing the devices.*
 - *Installation and maintenance of these devices may only be carried out by trained, expert personnel.*
 - *Observe the specified technical data and dimensional drawings of the devices.*
 - *Use the correct tools for mounting the devices.*
-

3.1 Target group

This chapter contains information for the technicians responsible for installing the components of the Smart Logistics Hub. Experience in mechanical work and basic electrical engineering knowledge is assumed. Previous knowledge of the Smart Logistics Hub or other GANTNER systems is not required.

3.2 Installation instructions

The GAT SMART.Lock 7020 electronic locks and the associated controllers as well as the central terminal are delivered as separate components for installation into the individual boxes. As no RFID identification occurs at the GAT SMART.Lock 7001, almost all materials are possible for the production of the boxes and box doors.

This manual describes the installation of the central terminal. The installation of the GAT SMART.Lock 7001 locks and controllers is described in the GAT SMART.Lock 7001 system manual.

CAUTION! Before installing the GAT SMART.Lock 7001 locks, please read the GAT SMART.Lock 7001 system manual and follow the installation instructions described therein.

3.3 Central terminal

The central terminal is designed for flush mounting, e.g., in a box wall or box door. For this purpose, a cutout must be made in the box wall/door and 8 mounting holes drilled. The installation is then completed using the 8 mounting screws on the front panel and wing nuts, which are supplied with the terminal.

The central terminal has a metal cover on the back and thus forms a closed unit. The connection cables are inserted into the housing on the side of the metal cover and are equipped with strain reliefs.

3.3.1 External dimensions

When planning the installation location, note the external dimensions of the central terminal including the metal cover. The height of the terminal including the cover is higher than the front cover.

If the central terminal is mounted into a box door, the rotation radius (1 in figure below) must also be considered, since the required width of the terminal is greater than the front cover when the box door is opened.

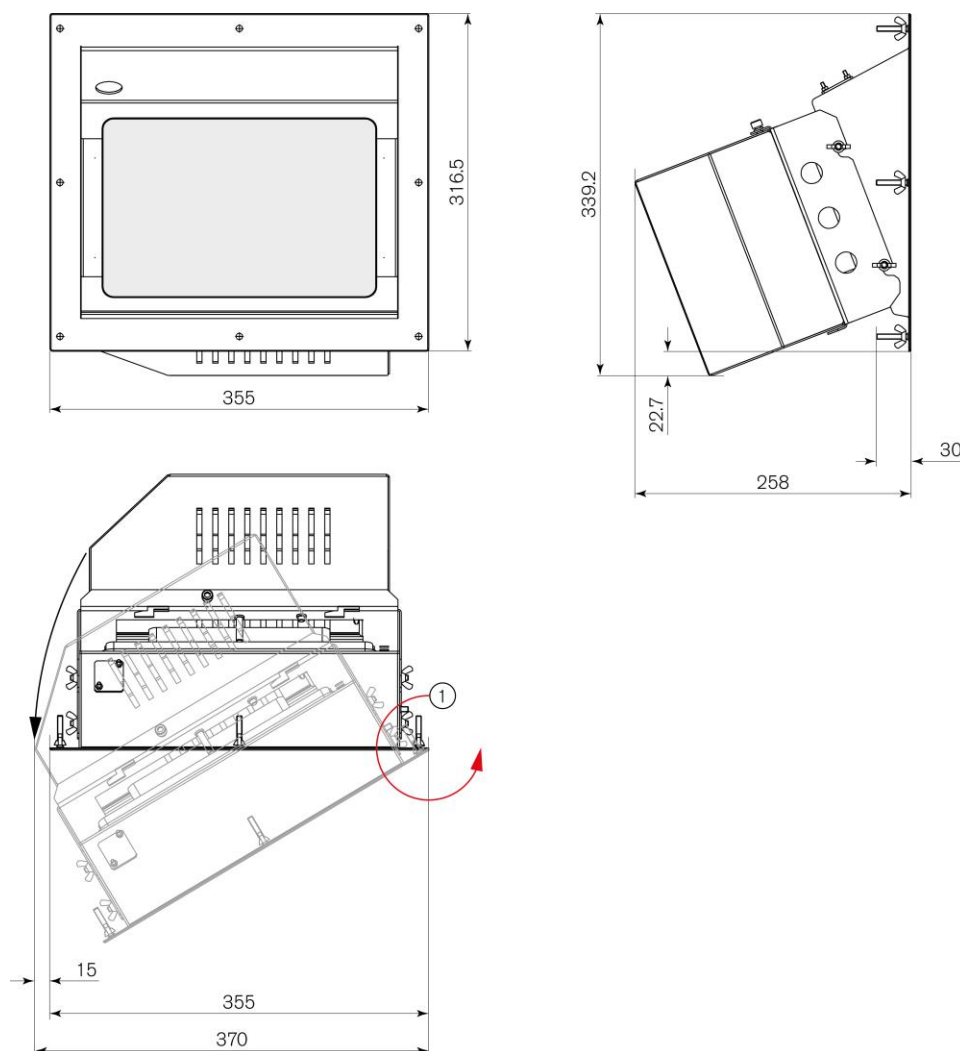


Figure 3.1 – External dimensions of the central terminal (dimensions in mm)

3.3.2 Preparing for installation in the box door / wall

The following drawing shows the dimensions of the cutout and the 8 mounting holes required to mount the central terminal.

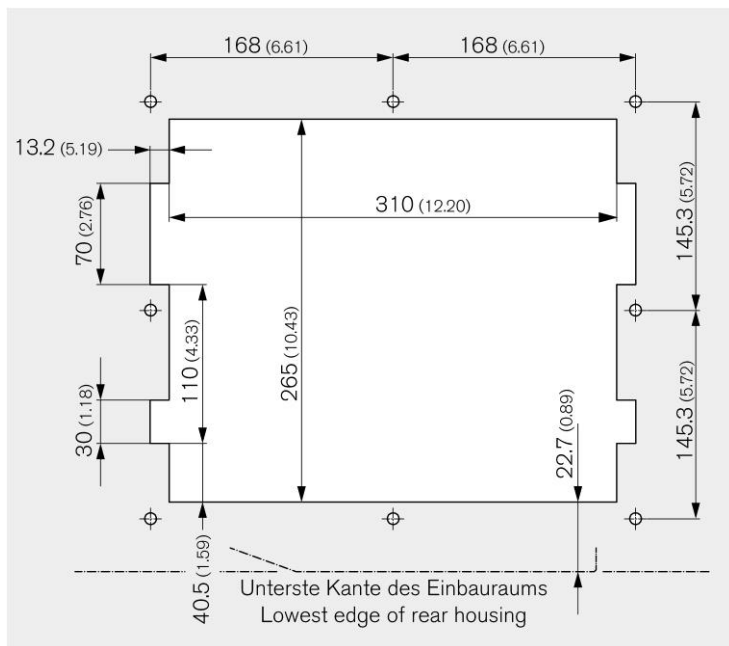


Figure 3.2 – Dimensions of the cutout and the mounting holes for the central terminal (dimensions in mm, inches in brackets)

To transfer the dimensions of the cutout as well as the mounting holes to the correct positions, the drilling template for the central terminal can be used. This is available to download from the GANTNER website (login required).

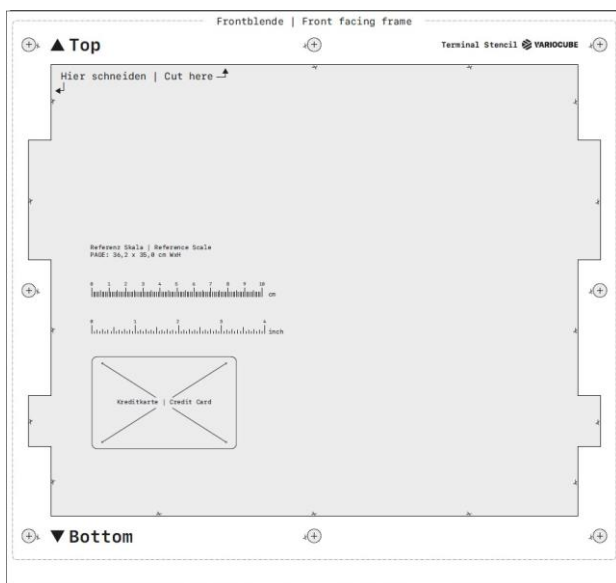


Figure 3.3 – Drilling template for the central terminal (not to scale)

3.3.3 Installation process

ATTENTION! Complete the installation as described below in a de-energized state (supply voltage not applied).

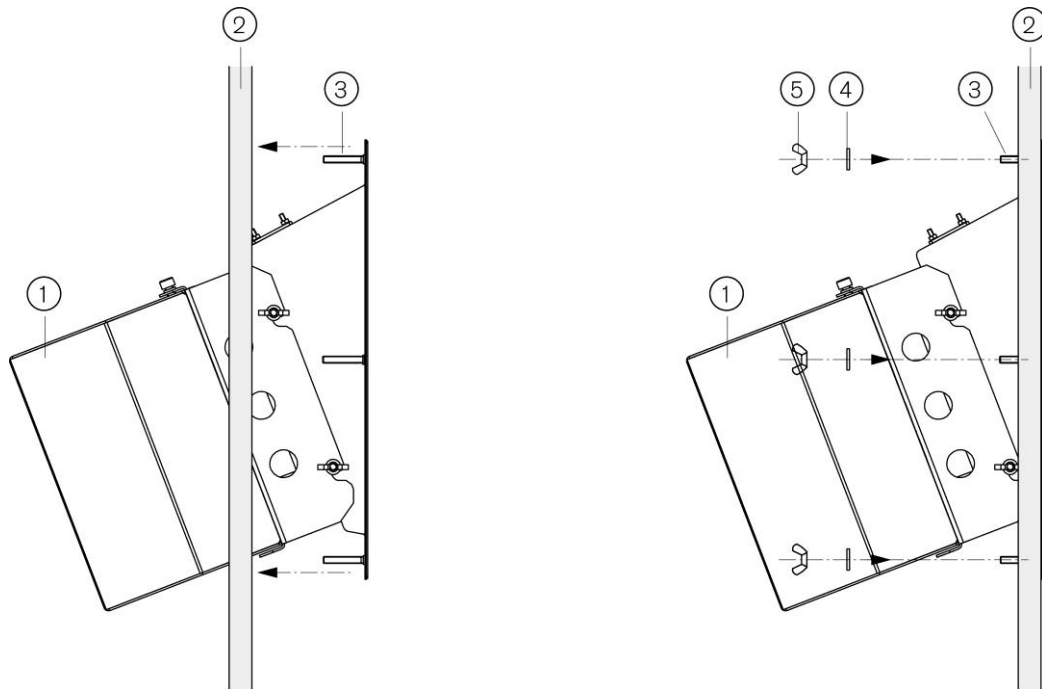


Figure 3.4 – Installation of the central terminal

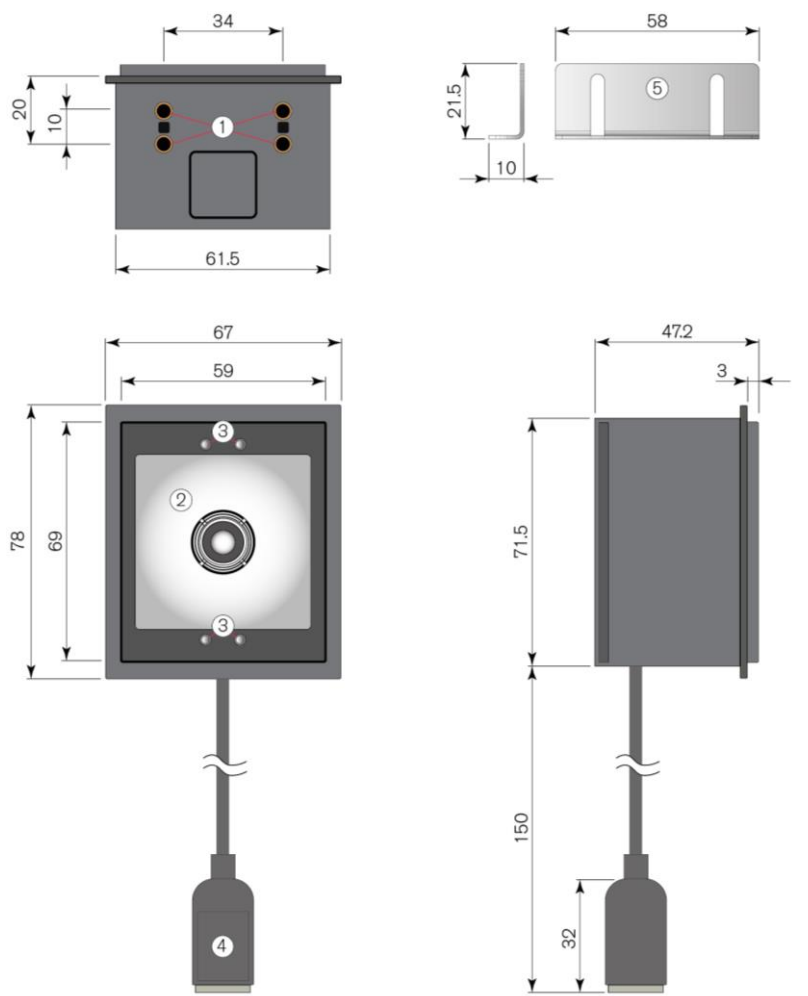
- Guide the central terminal (1) from the front of the box into the recess (2) so that the 8 mounting screws (3) are inserted through the holes.
- Place washers (4) on the mounting screws.
- Fasten the wing nuts (5) to the mounting screws.

3.4 Installing the barcode reader

To allow printed barcodes and QR codes to be read, the SLH Barcode Reader is available to order as an option from GANTNER (Part No. 1109614). As the operation and electrical connection of the barcode reader are linked to the central terminal, install the barcode reader in the same box as the central terminal or in a box directly adjacent to the central terminal. For this purpose, a cutout must be made in the box wall/door.

Two SLH Barcode Reader Mounting Brackets are required to install the barcode reader. The mounting brackets attach to the top and bottom of the barcode reader using two screws and can be adjusted to suit the thickness of the box wall. **NOTE:** The mounting brackets allow a maximum wall thickness of 12 mm.

i Part No. 1109615 contains two mounting brackets and four mounting screws that are required to install one SLH Barcode Reader.



- 1 Screw holes for mounting bracket (M3, depth = 3.5 mm)
- 2 Barcode scan window
- 3 IR sensor
- 4 Data port
- 5 SLH Barcode Reader Mounting Bracket

Figure 3.5 – Dimensions and features of the SLH Barcode Reader and Mounting Bracket (dimensions in mm)

ATTENTION! Complete the installation as described below in a de-energized state (supply voltage not applied).

To install the barcode reader, complete the following steps:

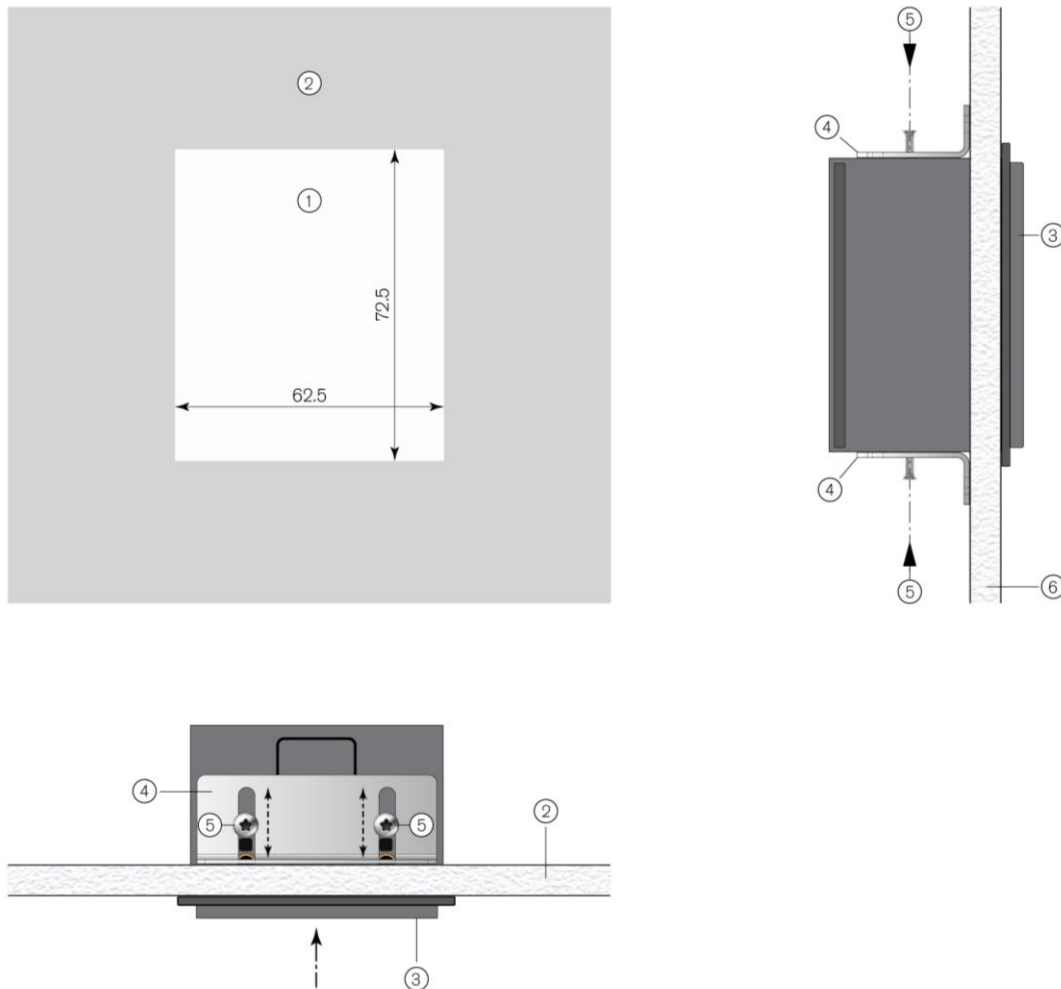


Figure 3.6 – Installation of the SLH Barcode Reader and Mounting Bracket (dimensions in mm)

- Cut out a recess (1) for the barcode reader in the box wall (2) according to the dimensions shown.
- Guide the barcode reader (3) from the front of the box into the recess.
- Attach the mounting brackets (4) to the top and bottom of the barcode reader using the supplied M3 screws (5). Two screws per mounting bracket are required.
- Slide the mounting brackets (4) forward so that they sit firmly against the box wall (2).
- Tighten the mounting bracket screws (5) ensuring that the barcode reader is firmly attached and cannot move.

i See chapter “4.5 Connecting the barcode reader” for instructions on completing the electrical connections of the barcode reader.

3.5 Installing the main and sub controllers

The GAT NET.Controller M 7020 main controller as well as the GAT SMART.Controller S 7020 sub controllers must be placed near the associated locks and the central terminal in order to minimize the cable lengths to these components. Typically, the controllers are placed in, on, or under the boxes.

The controllers must be placed in a secure location protected from unauthorized access. When mounting controllers more than 2 meters above the floor, the controllers must be secured via the mounting holes provided in the base of the housing using three screws. The dimensions are the same for all controller types.

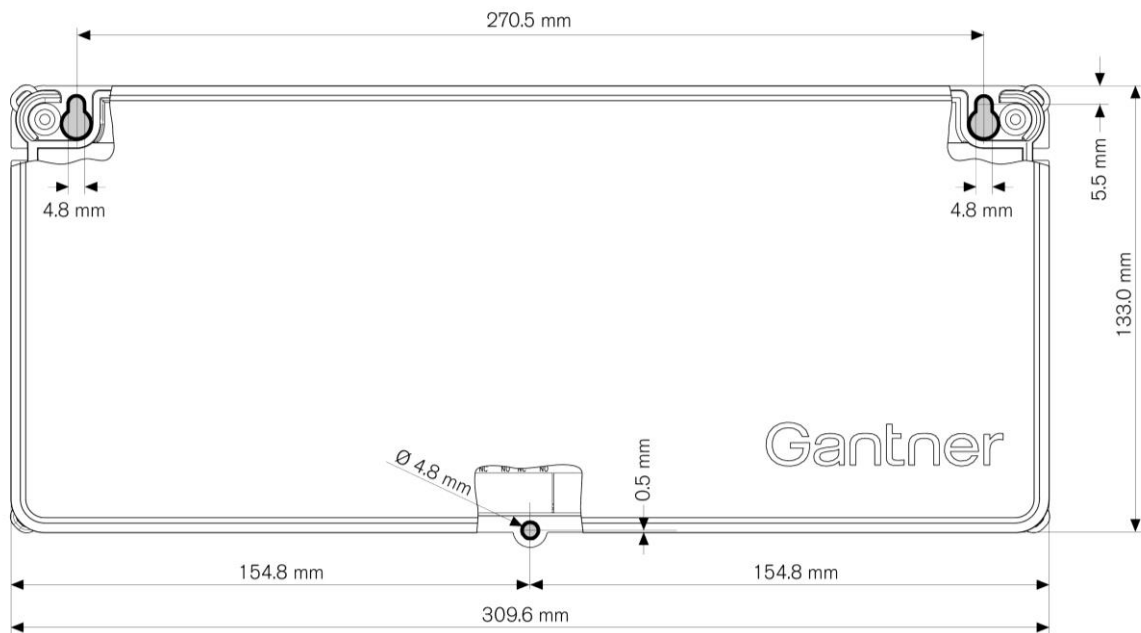
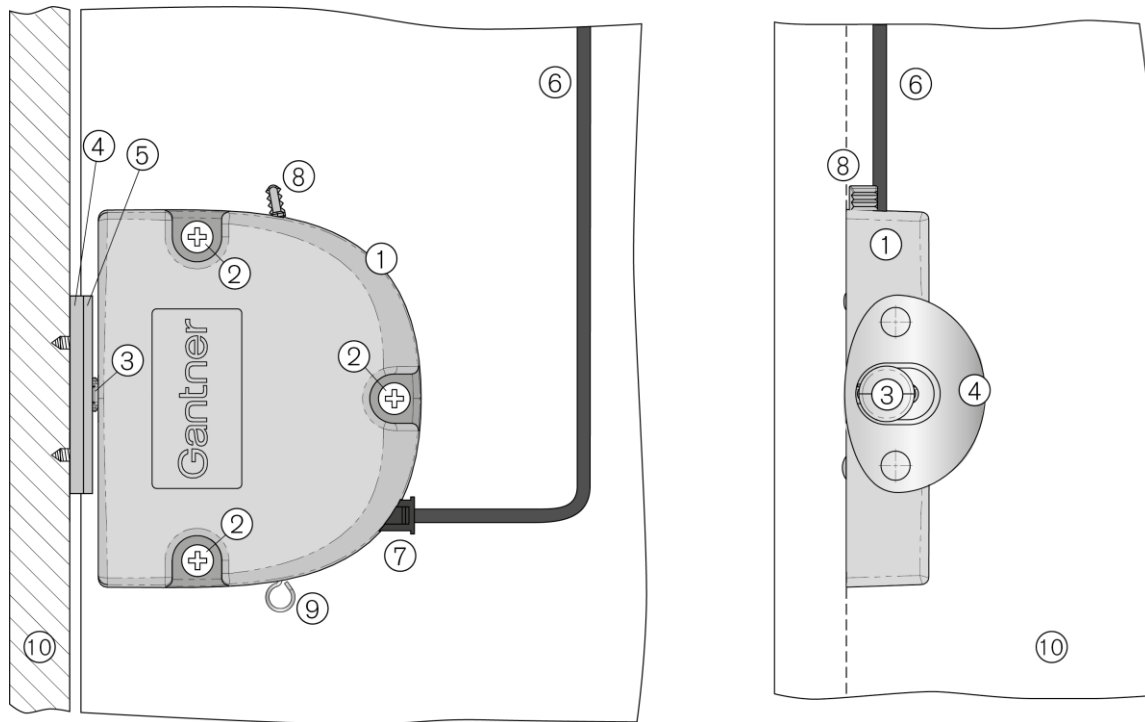


Figure 3.7 – Mounting the controllers (dimensions in mm)

ATTENTION! Please refer to the GAT SMART.Lock 7001 system manual for detailed installation instructions.

3.6 Installing the GAT SMART.Lock 7020 locker locks

The locks can be mounted in any position and orientation on the inside of the boxes. The matching bolt set must be mounted on the box door in the correct position so that the door bracket of the bolt set moves exactly into the opening on the GAT SMART.Lock 7020 when the box door is closed.



- | | |
|-----------------------------------|----------------------------------|
| 1 GAT SMART.Lock 7020 locker lock | 6 Connection cable to controller |
| 2 Mounting screws (3 x) | 7 Connection plug |
| 3 Door bracket | 8 Mounting lock |
| 4 Door plate | 9 Emergency opening |
| 5 Spacer plate | |

Figure 3.8 – Installing the GAT SMART.Lock 7020 (principle)

ATTENTION! Please refer to the GAT SMART.Lock 7001 system manual for detailed installation instructions. The information, dimensions, and instructions must be followed exactly to ensure fault-free operation of the GAT SMART.Lock 7020.

4 ELECTRICAL CONNECTION

The central terminal and the controllers are powered by mains voltage. Furthermore, a network connection via a mobile network or a LAN interface is necessary and the connection between the central terminal and the controllers and locks must be established.

The other internal electrical connections in the central terminal are prepared ex works and must not be changed.

⚠ CAUTION



Electric Shock

- ➔ *Touching live power cables may cause injury due to electrical shock.*
 - *Before working on the device or mounting/dismounting, the device must be disconnected from the power supply.*
 - *Observe the specified technical data and dimensional drawings of the device.*
 - *The applicable safety and accident prevention regulations must be observed.*
 - *Protective devices must not be removed.*
-

4.1 Target group

This chapter contains information for the electricians responsible for completing the electrical connection of the central terminal, the main and sub controllers, and the GAT SMART.Lock 7001 locker locks. This work may only be completed by qualified personnel. For the connection of the GANTNER locker lock system, the documentation of the GAT SMART.Lock 7001 system must also be read.

4.2 Central terminal connections

The electrical connections for the central terminal are located below the metal cover. Remove the cover as follows.

CAUTION! Before removing the cover, the device must be disconnected from the power supply.

- Unscrew the upper screw (2) on the housing (1).

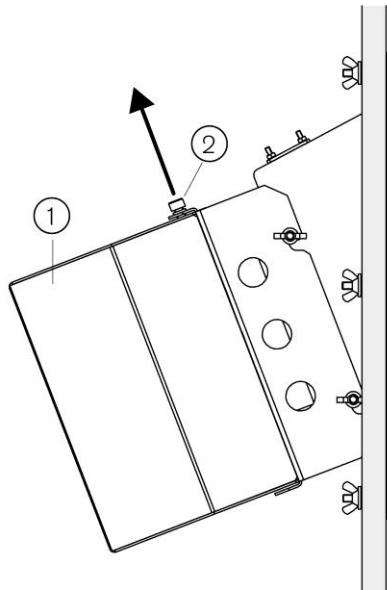


Figure 4.1 – Housing cover - Step 1

- Slide the housing to the left so that the tabs (3) are pushed out of the guides.
- Remove the housing to the rear.

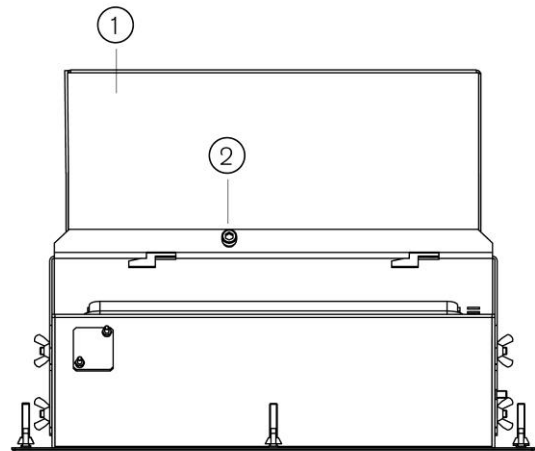
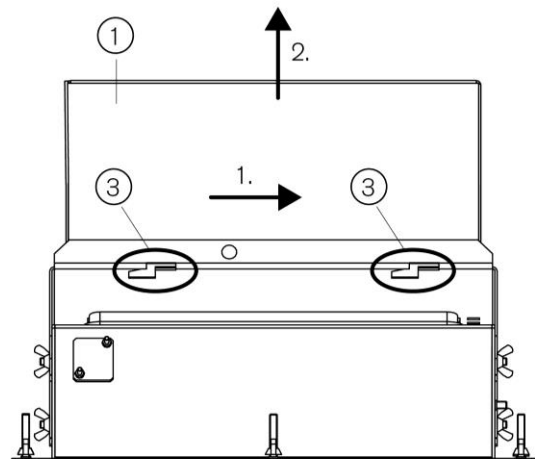
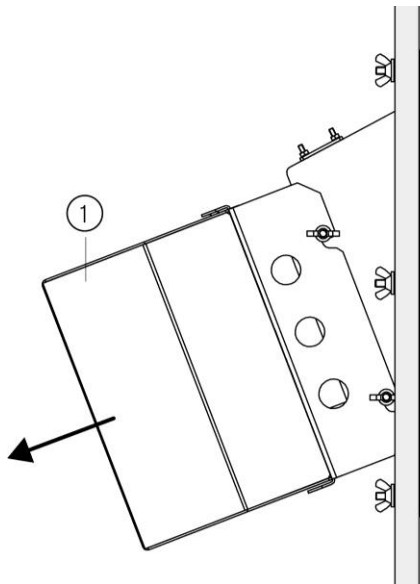


Figure 4.2 – Housing cover - Step 2



4.3 Network connection (LTE, LAN/Ethernet)

After installing the terminal in the box door, the network connection must be completed. Using LTE, a connection to the Internet and the VC Cloud that is independent of a local network such as the company network is possible. For this purpose, the LTE antennas must be connected as shown in the following figure and positioned accordingly so that the required reception and transmission quality is achieved. Depending on the box material and type, the antennas can also be placed in the box.

Alternatively, the antennas can be connected to the local network via LAN cable. In this case, the following ports must be enabled for communication.

- Port 22
- Port 53
- Port 80
- Port 123
- Port 443
- Port 8140
- ICMP

- Connect the connection cables of the LTE antennas to the "MOBILE" screw contacts.
- Suitably position the LTE antennas to ensure good reception. Depending on the box material and the type of installation, you can either place the antennas in the same box as the terminal or in another location outside the box.

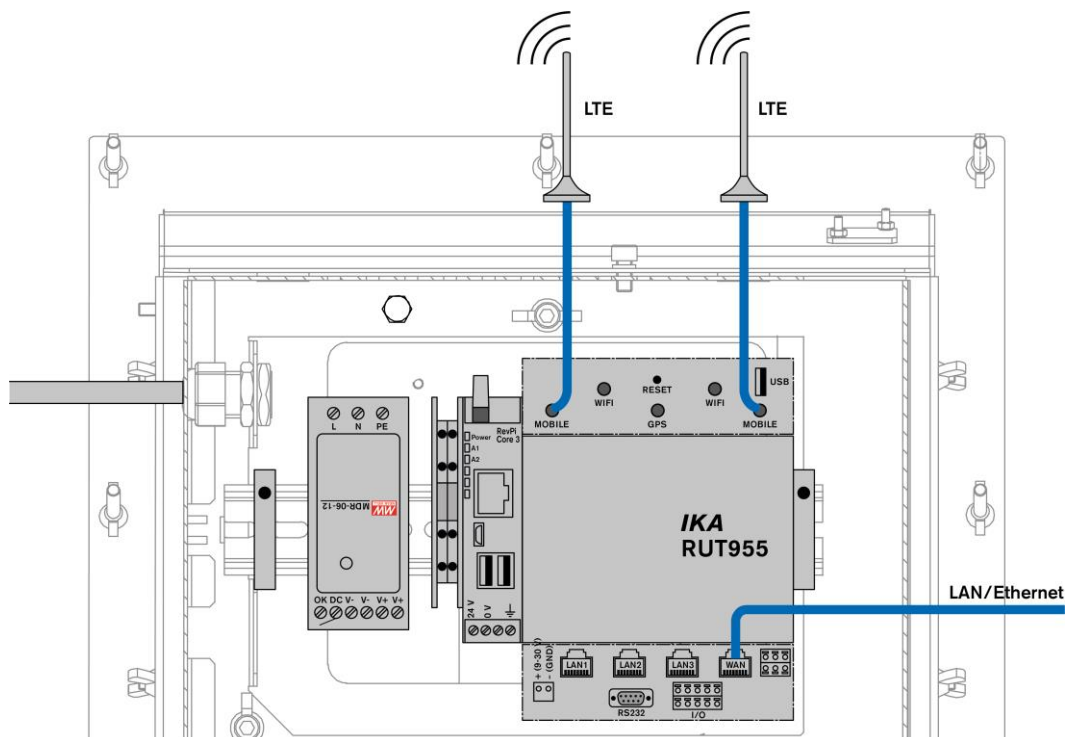


Figure 4.3 – Network connection

Recommended cables / cable lengths for LAN Ethernet:

- Shielded and twisted data cable (recommendation min. CAT. 5 for 100 MBit)
- Supply voltage via 2 wire pairs (PoE)
- Max. cable length: 100 m

4.4 Connecting the controllers and locks

The main controller of the Smart Logistics Hub is connected to the central terminal. The main controller processes the commands of the central terminal and then controls up to 8 sub controllers. Up to 24 GAT SMART.Lock 7001 locks can be connected to each sub controller.

For larger systems, several main controllers can also be networked.

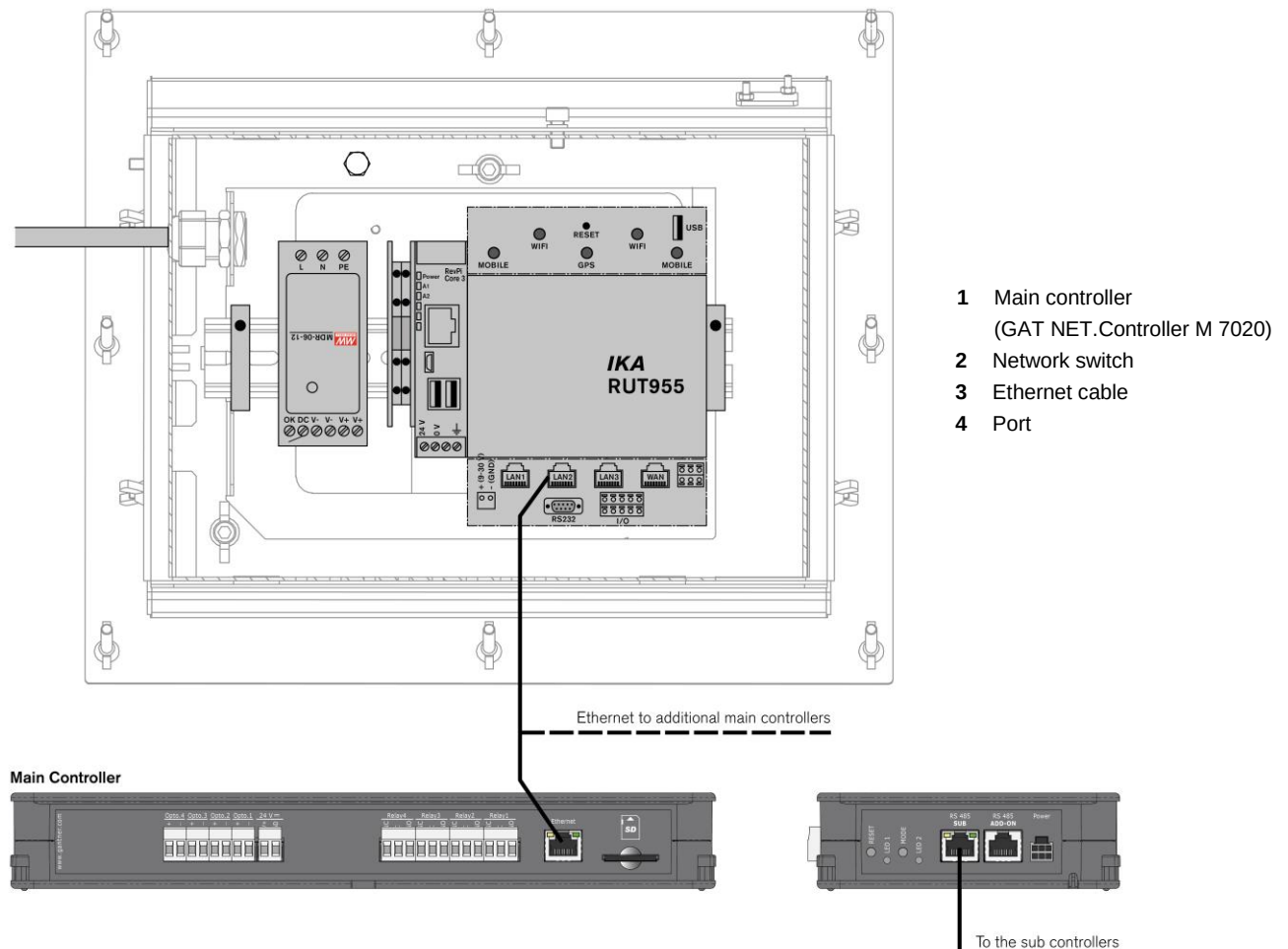


Figure 4.4 – Connection of the controllers and locks

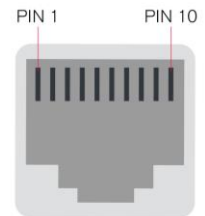
- ▶ Plug the patch cable (min. CAT. 5) into the RJ45 socket labeled "LAN2" on the right module.
- ▶ Connect the other end to the RJ45 socket labeled "Ethernet" on the main controller.
- ▶ The connection of additional main controllers is possible via this network cable. To do this, use a switch on the LAN2 port to connect additional controllers.
- ▶ Connect the sub controllers to the "RS 485 SUB" output (RJ45) of the main controller.
- ▶ Please refer to the GAT SMART.Lock 7001 system manual for detailed instructions on connecting the controllers and locks.

NOTE! Before connecting the power supply to the central terminal, the power supply to the controllers must be applied. See the following section.

4.5 Connecting the barcode reader

The barcode reader connects to the central terminal via USB interface. For this a USB cable with an RJ45 connector and a USB A connector is required. The required USB cable is included in the scope of supply. The PIN configuration of the barcode reader's data port (2) is as follows:

PIN	Signal	Type	Function
1	AGND	P	Ground
2	nTRIG	I	Trigger signal input: active low
3	VCC	P	Power+ (DC 5V)
4	TXD	O	RS-232 output
5	RXD	I	RS-232 input
6	CTS	I	Clear to send (RS-232)
7	RTS	O	Request to send (RS-232)
8	GND	P	Ground
9	D-	I/O	USB signal
10	D+	I/O	



To connect the barcode reader to the central terminal, complete the following steps:

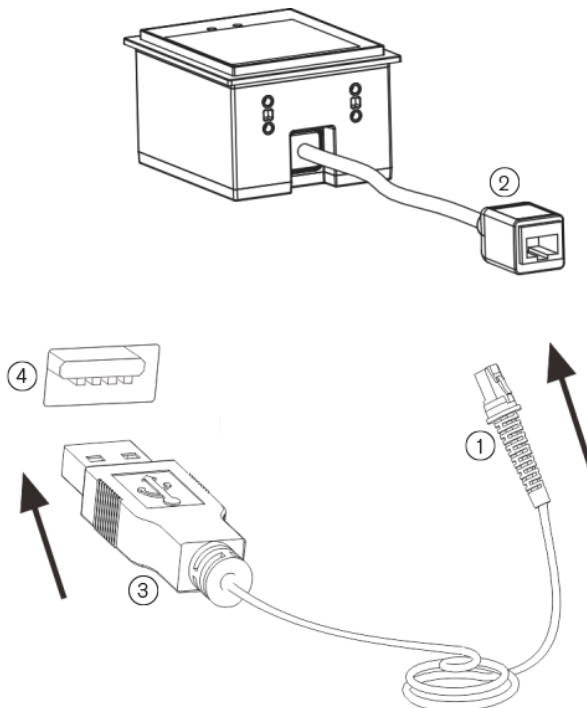


Figure 4.5 – Connecting the barcode reader to the central terminal

- Plug the cable's RJ45 connector (1) into the barcode reader's data port (2).
- Plug the cable's USB connector (3) into an available USB port (4) on the central terminal.



The USB ports of the central terminal are shown in Figure 4.6.

4.6 Internal connections of the central terminal

The modules and the display unit of the central terminal are pre-wired upon delivery. Please check that the wiring is correct according to the following figure:

- Module power supply connections (red, black, gray)
- Display HDMI connection
- USB connection
- LAN connection

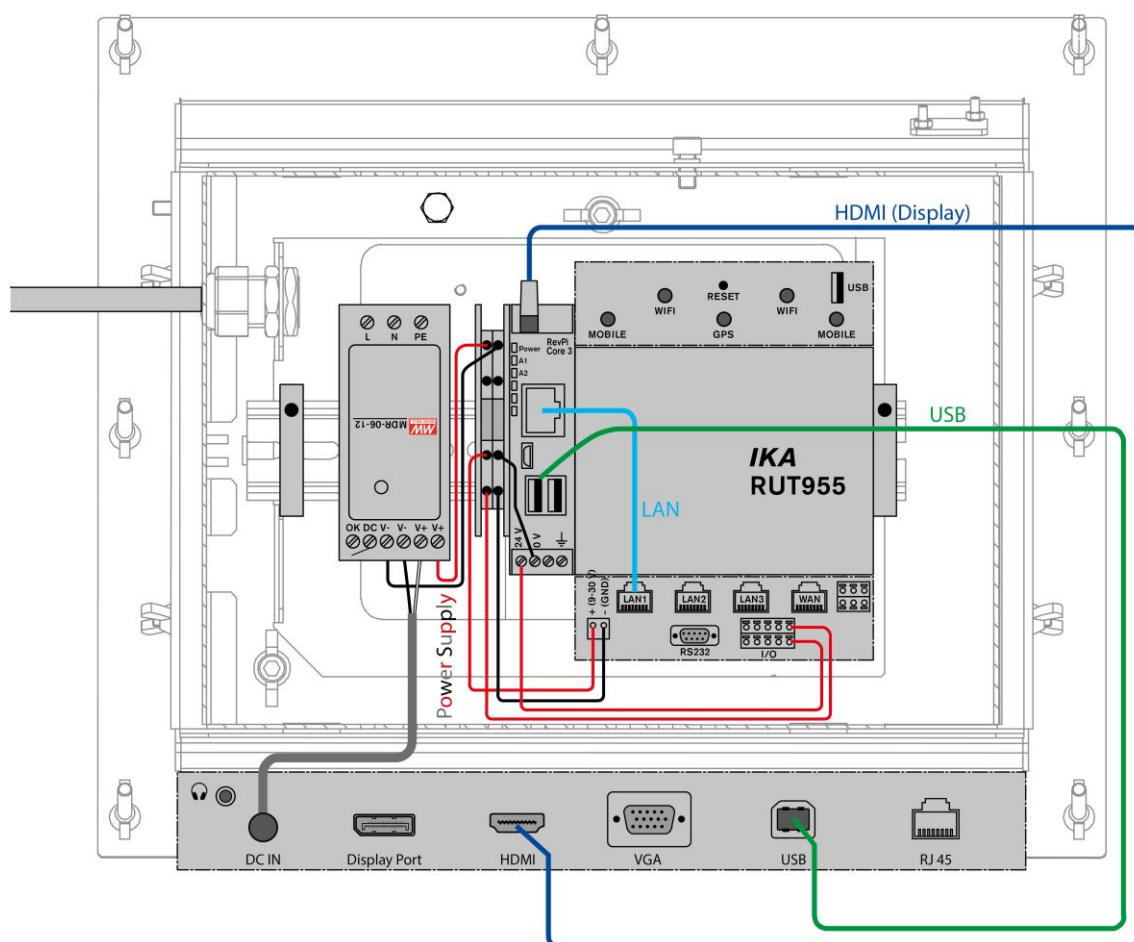


Figure 4.6 – Internal electrical connections of the central terminal

4.7 Power supply

The power supply is provided via a mains power plug connected to the internal power supply of the central terminal. A mains voltage of UAC 230 V or UAC 115 V can be used (depending on the application). See chapter "7. TECHNICAL DATA" for technical data of the power supply.

ATTENTION! The mains power plug must not be connected until all electrical connections are completed.

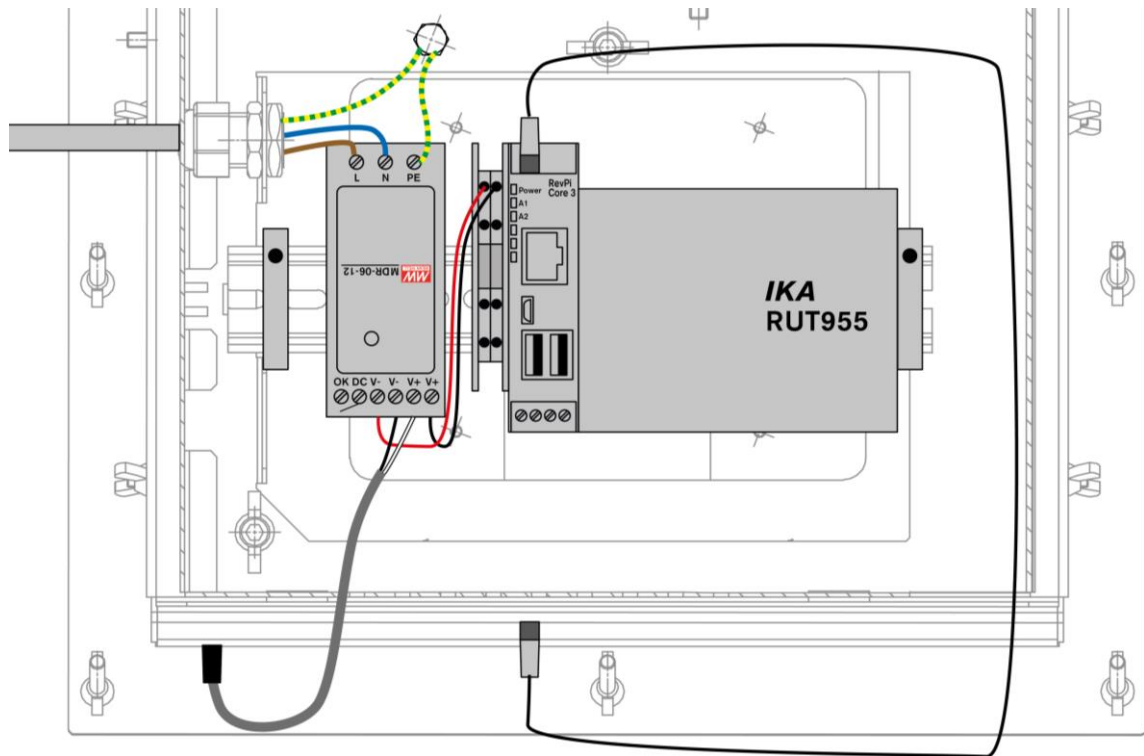


Figure 4.7 – Connecting the power supply to the central terminal

- ▶ Guide the power cable through the strain relief on the housing.
- ▶ Connect the ground wire to the screw on the housing as shown in the figure.
- ▶ Connect the "PE" terminal of the power supply to the ground screw as well.
- ▶ Connect the L and N wires of the power cable to the power supply as shown in the figure.
- ▶ Ensure that all connections have been correctly completed according to the previous sections.
- ▶ Replace the housing cover onto the central terminal and fasten the screw (see chapter "4.2 Central terminal connections").
- ▶ Connect the supply voltage to the controllers and wait approx. 1 minute until they have started up and are ready for operation.
- ▶ Finally, connect the mains power plug of the voltage connection to a power outlet.

5 CONFIGURATION

5.1 Target group

This chapter contains information for the technicians who commission and configure the central terminal and the Smart Logistics Hub. A basic understanding of electrical engineering is assumed. GANTNER recommends that only trained personnel carry out the configuration of the system. GANTNER offers regular training courses for its partners.

5.2 Overview and first steps

The Smart Logistics Hub is controlled and operated via the central terminal. This is the core of the entire system and the central control unit that operates the locks. The central terminal contains a computing unit on which an operating system (Linux) and the CUBE App Host software are preinstalled. After commissioning by switching on the power supply, the system starts and an Internet connection to the VC (VARIOCUBE) CLOUD service is automatically established.

NOTE! Ensure that an Internet connection is available.

By default, an LTE connection is used. **Here, care must be taken to ensure good reception quality of the antennas!** If the Internet is accessed via a LAN network, the necessary ports (see "4.3 Network connection (LTE, LAN/Ethernet)") must be enabled and access must not be blocked, e.g., by a firewall.

After establishing the connection to the VC Cloud, the central terminal receives further configuration settings for the respective functionality of the locker system via the cloud. The configuration and operation of the system also takes place in the cloud.

The included router is delivered with a pre-installed and pre-configured router operating system. Upon delivery, a SIM card is installed by default. The SIM card can be removed if required, e.g., if communication is to operate via a LAN network or if a different SIM card is to be used. This is only permitted after prior consultation with GANTNER Electronic GmbH, as the router is pre-configured and must be reconfigured in this case.

5.3 Prerequisites for use

- At least one sub controller (GAT SMART.Controller S 7020 or GAT NET.Controller S 7020) must be connected (see "4.4 Connecting the controllers and locks").
- The most current firmware must be installed in the sub controller (can be imported via the web interface).
- The first sub controller must be supplied power by its own power supply. The power supply via RS-485 cable from the main controller does not provide enough power to switch the locks reliably.

5.4 Required network connections

Protocol	Port	Destination name	Destination IP	Category	Use case
HTTPS	443	api.cubeadmin.center	52.18.72.253	System	System's operating API
SSH	57123	admin.immformer.com	85.31.2.88	Maintenance	SSH reverse tunnel for operator access
Puppet	8140	master001.puppetmaster.at	85.31.9.135	Maintenance	Automated software updates
DNS	53		1.1.1.1, 1.0.0.1, 8.8.8.8, 141.1.1.1	General connectivity	DNS access for our services and maintenance
HTTP HTTPS	80 443	archive.raspberrypi.org, raspbrian.raspberrypi.org, legacy.raspbian.org, deb.nodesource.com, deb.debian.org, og-repository.s3.amazonaws.com		Maintenance	Software update repositories

5.5 Configuration overview of the central terminal

The configuration of the central terminal and the Smart Logistics Hub is completed for the customer by GANTNER and VARIOCUBE according to their requirements and planning. Therefore, no additional configuration requirements are necessary after delivery.

After commissioning, i.e., installation, electrical connection, and switching on of the power supply to the central terminal and main and sub controllers, the administrator can configure the desired application. For this purpose, users are created in the system and the system functionality is defined. This configuration occurs via the VC Cloud in the respective web interface of the desired application.

The Internet links for the web interfaces of the applications are as follows:

- Postbox: <https://pobox.variocube.com/my/dashboard/>
- Intralogistics: <https://inhouse.variocube.com/>

In the case of the Intralogistics application, configuration as well as access to the system is also possible via an API. The description of the API is available via the following link:

- Intralogistics: <https://logistics-dev.variocube.com/api/docs/swagger-ui.html>

5.6 Postbox configuration (User or Administrator)

A "client administrator" is required to access the configuration of a system. The initial client administrator is predefined by VARIOCUBE / GANTNER upon delivery. This administrator can then create further administrators and Postbox users.

Various terms are used in the Postbox application:

- Tenant: A tenant is a system operator or a facility. Tenants are used to limit cloud access for system operators, so that each tenant can only see and edit their own system and users. Each user and operator must be linked to a tenant.
- Accounts: The end users who use the boxes to send/receive mail and parcels.
- Plans: Different plans can be defined for a tenant (optional). The functions and settings, e.g., price per month or transaction fees, are defined for each plan. One or more plans can be activated for users. The available functions are then determined by the plan.
- Users: The personnel who manage the Smart Logistics Hub. Users can log into the VC Cloud using their username and password.
- Cubes: A cube is a group of boxes, i.e., a local arrangement of a set of lockers that are treated as a unit.

5.6.1 Login

If you have your login details, you can log in to the Postbox web interface as follows.

- Open a web browser and enter the following link: <https://pobox.variocube.com/my/dashboard/>
 - The start screen for the Postbox application opens.

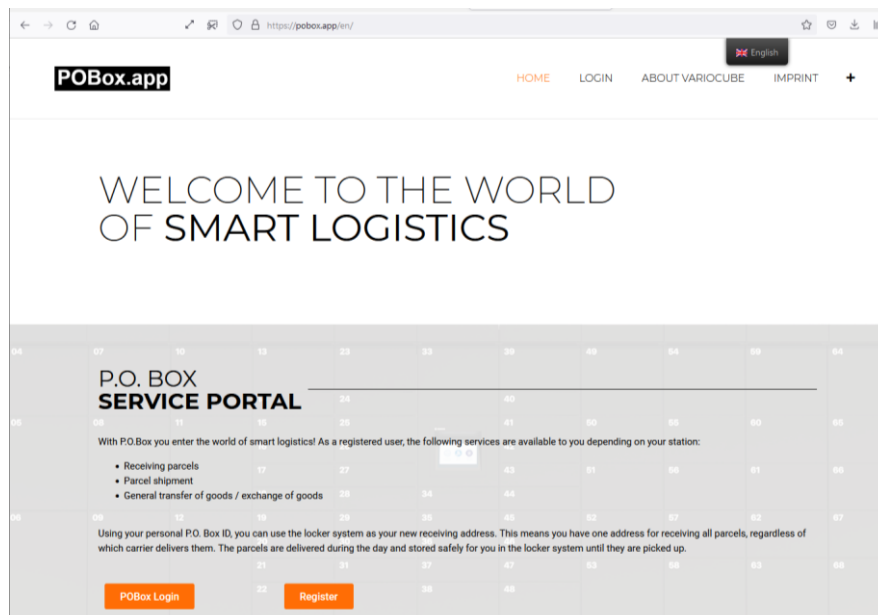


Figure 5.1 – Start screen of the Postbox application

- ▶ Select "Login".
 - The login screen opens.

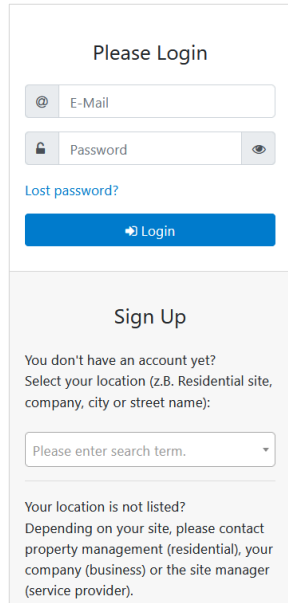


Figure 5.2 – Postbox login window

- ▶ Enter your login details (email and password).
- ▶ Click "Log in" to open the main window (dashboard) of the Postbox application (see "5.6.3. Dashboard for users").

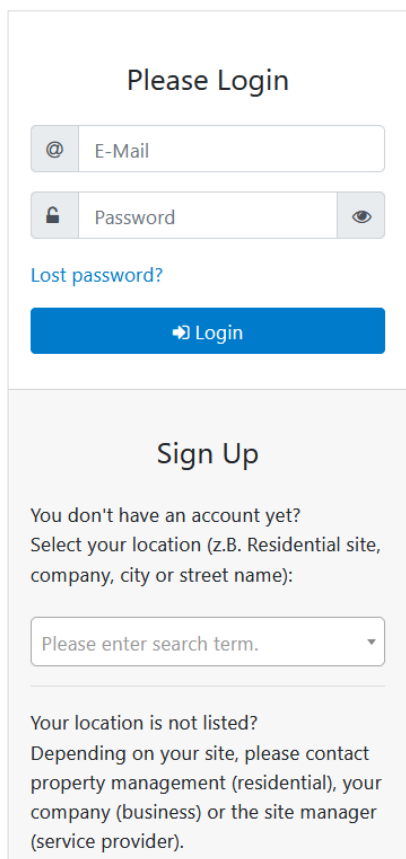
5.6.2 Registration

If you want to create a new user or operator or you do not have your user login details yet, you can register to gain access.



The registration must be confirmed by an existing tenant before access can be granted (configurable).

- ▶ Open a web browser and enter the following link: <https://pobox.app>
- ▶ The start screen for the Postbox application opens (see "5.6.1 Login").
- ▶ Select "Register".
- ▶ The login window opens.



The image shows a web interface for logging in and signing up. The top section is titled "Please Login" and contains two input fields: "E-Mail" with an @ icon and "Password" with a lock icon and a toggle eye icon. Below these is a link "Lost password?" and a blue "Login" button with a right arrow icon. The bottom section is titled "Sign Up" and contains the text "You don't have an account yet? Select your location (z.B. Residential site, company, city or street name):" followed by a search input field with the placeholder "Please enter search term." and a dropdown arrow. Below the search field is a note: "Your location is not listed? Depending on your site, please contact property management (residential), your company (business) or the site manager (service provider)."

Figure 5.3 – Postbox login window

- ▶ Select the tenant for which you want to register the user via the "Please enter search term" field. To do this, enter a search term to show the matching tenants.
 - After selecting a tenant, the registration window opens.

Registration
VARIOCUBE

Personal Data

Title

First Name

Last Name

Mr.

John

Citizen

Company Name (optional)

GANTNER

Address Line 1

Bundesstr. 12

Address Line 2

Zip Code

City

Country

6714

Nüziders

Österreich

Contact Data and Password

E-Mail

Phone

Phone

Password

Confirm Password

Confirm Password

Subscriptions

Gantner

Gantner

✓ Reception of parcels

✓ Transfer of goods

free of charge

☐ Ich stimme den [Nutzungsbedingungen](#) samt vorvertraglicher Informationen sowie der [Widerrufsbelehrung](#) zu und bin damit einverstanden, dass mir diese Dokumente an meine angegebene E-Mail-Adresse zugestellt werden.

☐ Ich möchte das Paketfach bereits vor Ablauf der 14-tägigen Rücktrittsfrist nutzen und stimme daher der damit verbundenen vorzeitigen Vertragserfüllung zu.

Submit registration

Figure 5.4 – Postbox - Registration window for new users

- ▶ Enter the data for the new user here. The information fields marked with a red star must be filled in, the remaining fields are optional.
- ▶ Make sure you enter the correct email address. This is required for receiving messages and confirming registration and will be used for login.
- ▶ Click on "Submit registration".
 - An email is sent that you must confirm to complete the registration.

5.6.3 Dashboard for users

The dashboard is displayed after logging in with username and password.

i The operation for a user is described here. When an operator ("Account") logs in, the Postbox dashboard is displayed for the user where they can edit their deliveries. This operation is described in chapter "6.3. Postbox – instructions for the user".

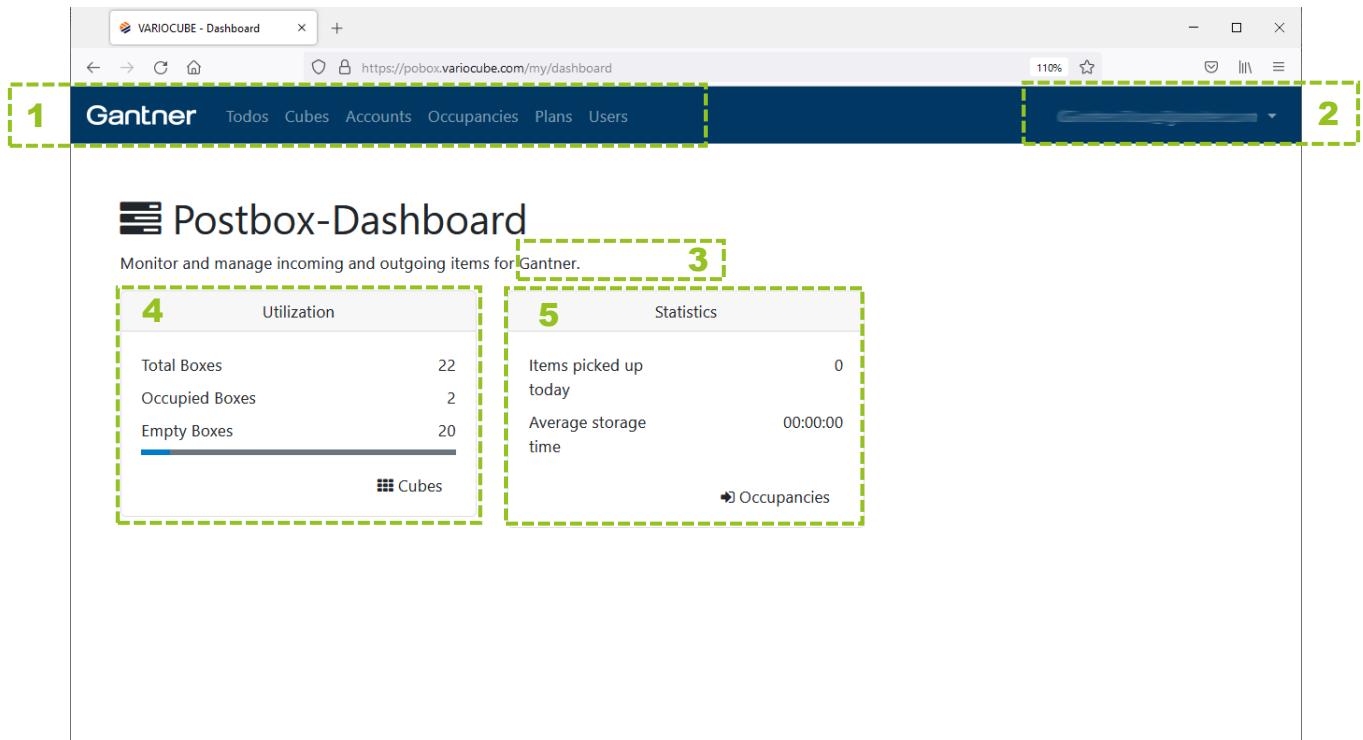


Figure 5.5 – Postbox - Dashboard (main window)

The following information is available here.

1 – Menu:

These menu items allow you to access the functions of the Postbox web interface (e.g., create users, display occupancy of the boxes, etc.). These functions are described on the following pages of this manual.

- Logo: Click on the logo to display the dashboard.
- To dos: Registration requests from users to be processed.
- Cubes: Overview of the individual installations (groups of boxes) of the tenant.
- Accounts: The accounts used to control the users of the Postbox boxes can be managed here.
- Occupancies: Display of the used boxes with information about their usage.
- Plans: Plans contain settings that define the functionality of the boxes (functions, costs, ...). Plans are optional.
- Users: Management of administrators and users of the Postbox web interface for the tenant.

- 2 – Operator/Administrator:** Here you can see the currently logged in administrator or operator of the Postbox application.
- 3 – Client:** The current client is displayed here.
- 4 – Utilization display:** Here you can see the total number of boxes, the number of currently occupied (locked) boxes, and the boxes that are currently unoccupied.
By clicking on "Cubes", the cubes in detail are displayed (see "5.6.5. Cubes – overview of the box groups").
- 5 – Statistics display:** The first number is the number of deliveries picked up on the current day, i.e., the number of box openings.
The average storage time is the time a delivery is held in a box on average, i.e., the time the boxes are locked for.
By clicking on "Occupancies", you can display detailed information about the cubes (see "5.6.7 Occupancies – current locker information").

5.6.4 To dos – processing account registration requests

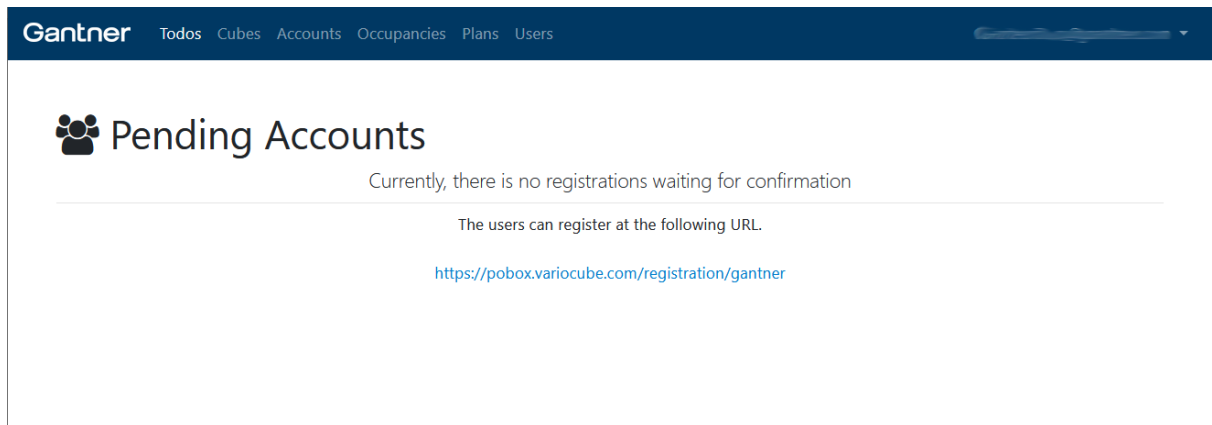


Figure 5.6 – Postbox, To Dos Overview (No Registration Requests)

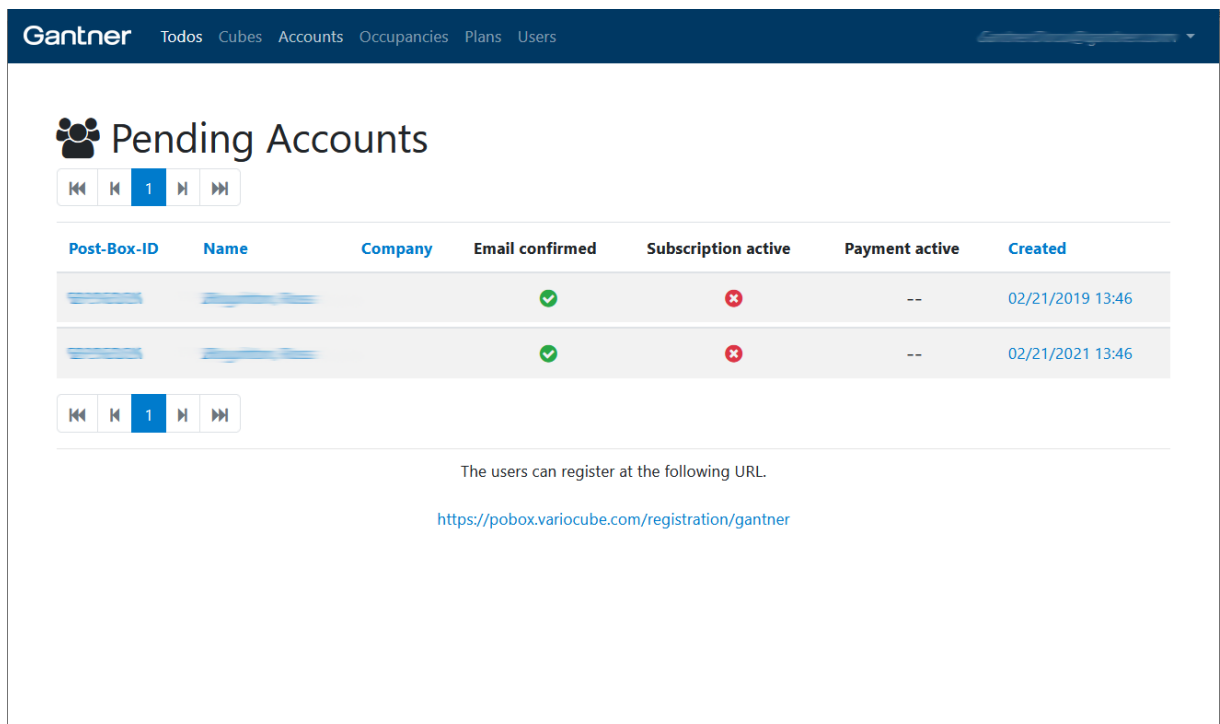
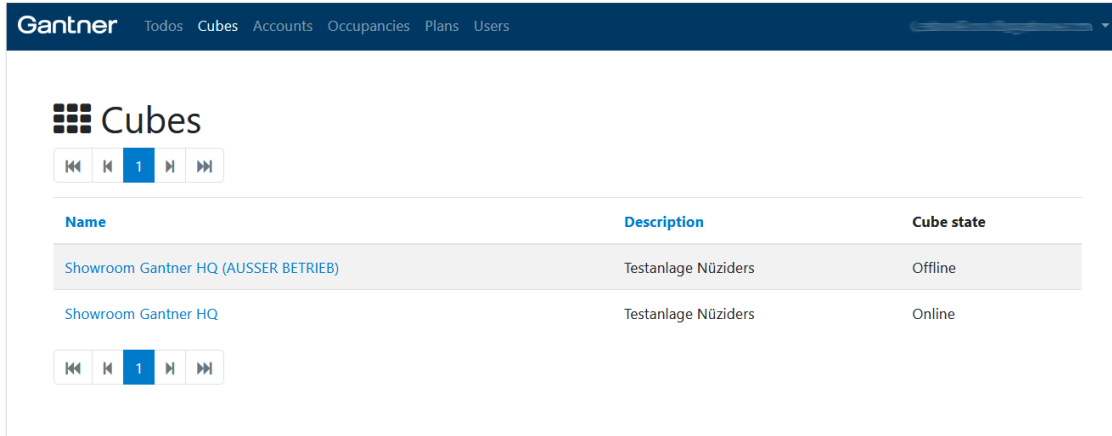


Figure 5.7 – Postbox, To Dos Overview (open registration requests)

Shown here are all the open registration requests of accounts that still need to be processed and manually approved depending on whether the request is valid. More information about this topic can be found in section "5.6.6 Accounts – managing users of the boxes".

Below the open tasks is the link that allows a user to register for the current client.

5.6.5 Cubes – overview of the box groups



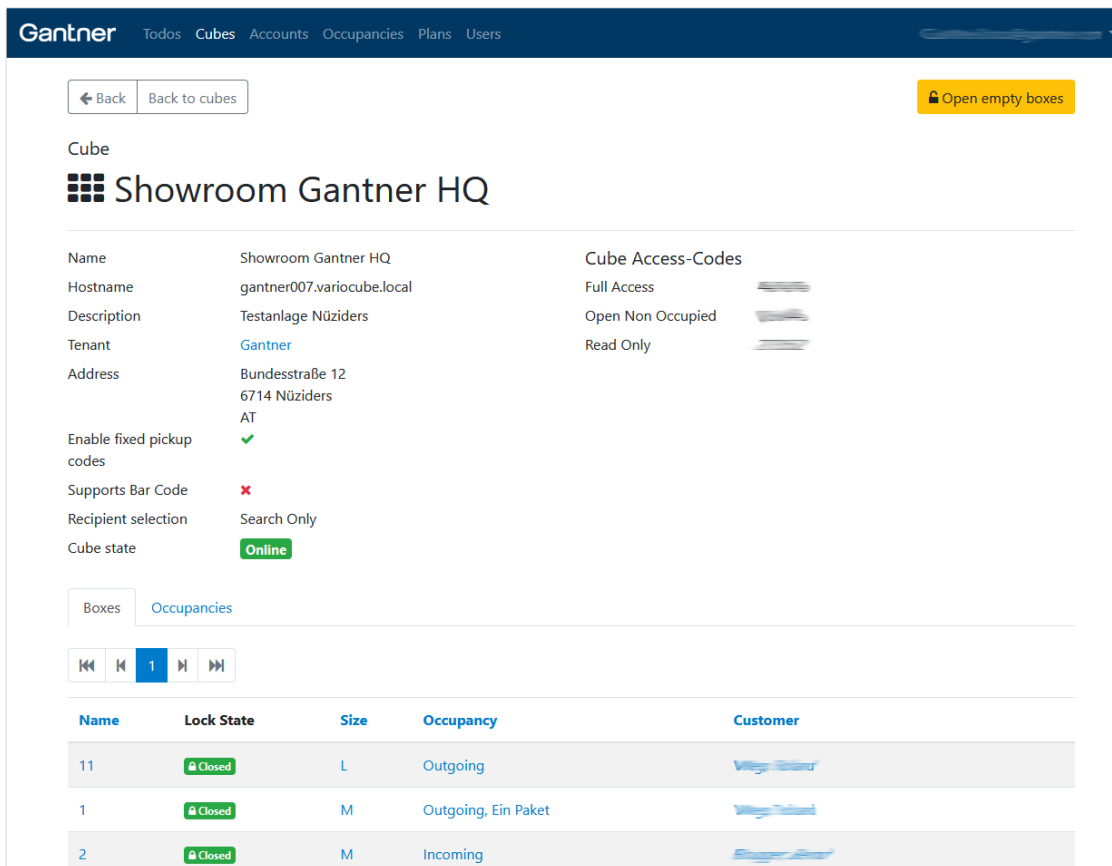
Name	Description	Cube state
Showroom Gantner HQ (AUSSER BETRIEB)	Testanlage Nüziders	Offline
Showroom Gantner HQ	Testanlage Nüziders	Online

Figure 5.8 – Postbox, Overview of the cubes

Listed here are all the cubes that are assigned to the current client. The status of the lockers is also displayed.

"Online" means that the boxes are usable.

Clicking on a cube displays the information for the cube.

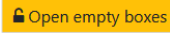


Name	Lock State	Size	Occupancy	Customer
11	Closed	L	Outgoing	
1	Closed	M	Outgoing, Ein Paket	
2	Closed	M	Incoming	

Figure 5.9 – Postbox, Details of a cube

Shown here is information such as the name, tenant, and address of the locker group. The following information is also available here:

- Enable fixed pickup codes: A fixed pickup code can be defined for each user ("Accounts") if this function is enabled. Fixed pickup codes are required for permanently assigned, permanently allocated boxes.
- Supports barcode: This indicates whether barcodes are allowed for identification (in addition to or instead of the pickup codes). A barcode reader must be connected to the central terminal for this purpose.
- Recipient selection: This shows how the recipients can be selected at the central terminal. The current settings for the locker group are displayed here.
"Show list": Each accounts/user is shown on the display and can be selected there.
"Search only": Searching for accounts/users is allowed on the display.
"Deactivated": It is not possible to search for accounts/users. Access to the boxes or users is possible only with a valid Postbox ID number.
- "Boxes" tab: The boxes of the group are listed here. The current status and customer for each box are displayed here.
- "Occupancies" tab: Here all the uses of the boxes are listed. For each entry, the box number, the delivery company, and the status, i.e., whether the box is still occupied or the delivery has been picked up, are shown.
- Cube access codes: The access codes are required for on-site maintenance of the facility. These codes allow various actions to be carried out for the cube. To do this, the relevant code must be entered on the central terminal by pressing the cogwheel icon in the top-right corner and then selecting "Settings". The code must then be entered, which opens the service menu. In the service menu, important functions such as opening boxes in case of an error, restarting the system, and testing of the payment terminal and barcode reader can be performed on-site.
There are different codes with different functions:
 - Full access: This code is used to open all boxes, regardless of the locking status. The assignments in the Postbox application are not affected by this!
Various system tests (barcode reader, etc.) can also be completed.
 - Open non occupied: Only unoccupied boxes can be opened with this code. This code is intended for maintenance personnel to examine and clean the boxes without disturbing the mail items.
 - Read only: This code can be used to view and check the status of the boxes. It is not possible to open the boxes.

You can open the boxes of the currently displayed locker group via the button . Only the empty, i.e., not currently occupied, boxes are opened.

- ▶ Click the "Open empty boxes" button.
 - The following window is displayed.

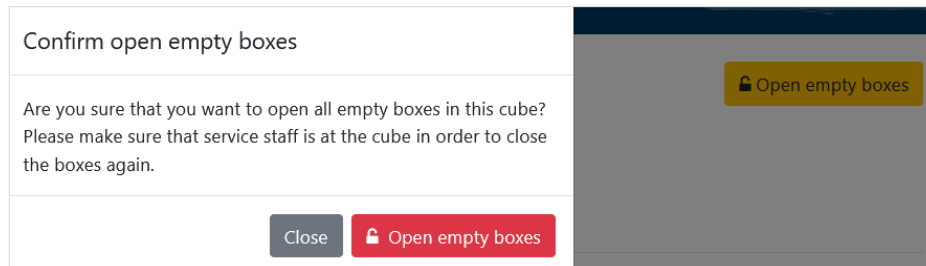
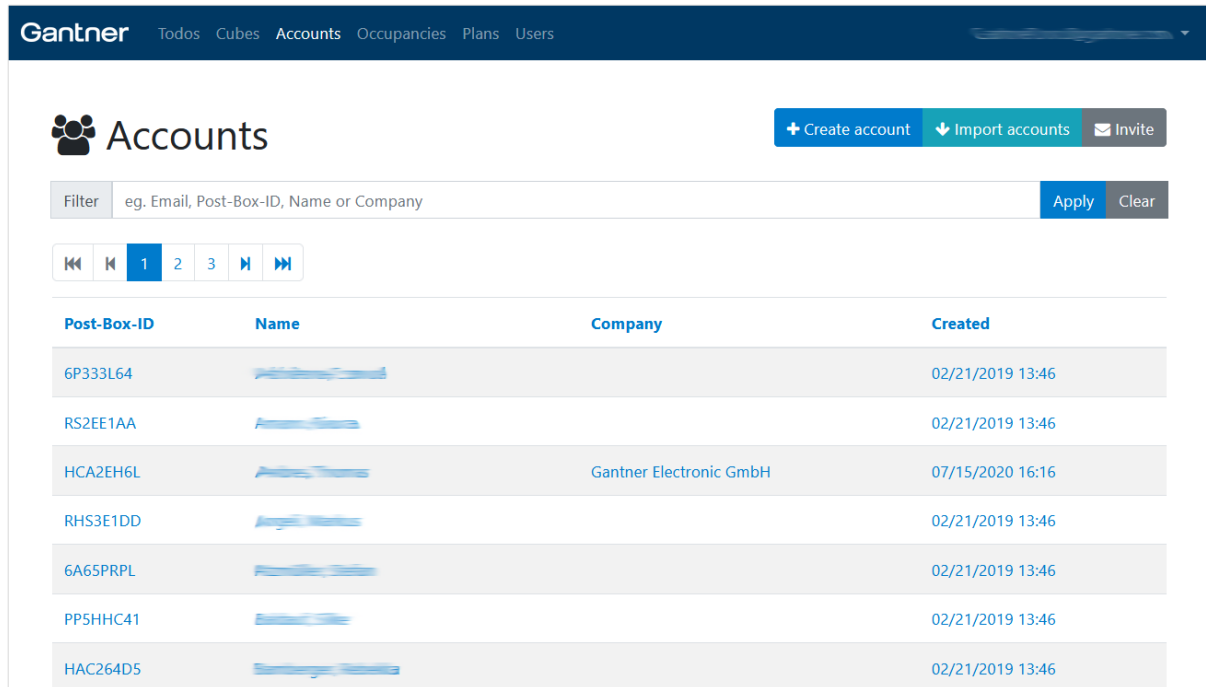


Figure 5.10 – Confirming the locker opening

- ▶ If you are sure that the boxes are to be opened, select "Open empty boxes", otherwise cancel the opening with "Close".
 - After opening is confirmed, the boxes are unlocked and the doors spring open.

5.6.6 Accounts – managing users of the boxes



Post-Box-ID	Name	Company	Created
6P333L64	[Redacted]		02/21/2019 13:46
RS2EE1AA	[Redacted]		02/21/2019 13:46
HCA2EH6L	[Redacted]	Gantner Electronic GmbH	07/15/2020 16:16
RHS3E1DD	[Redacted]		02/21/2019 13:46
6A65PRPL	[Redacted]		02/21/2019 13:46
PPSHHC41	[Redacted]		02/21/2019 13:46
HAC264D5	[Redacted]		02/21/2019 13:46

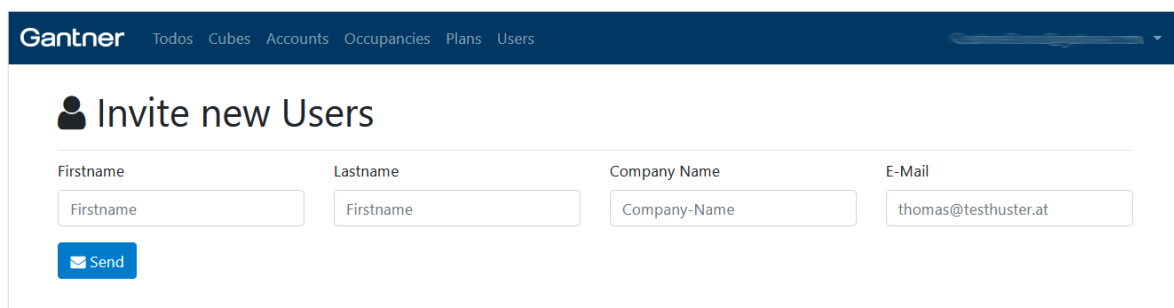
Figure 5.11 – Postbox, Accounts (Users)

Shown here are all the created users (accounts) for the current tenant. The Post-Box ID number of the user and the date the account was created are displayed in the list.

Via the "Filter" field, you can search for specific information in the list.

Creating an account for a new user

The buttons in the top-right corner are used to create a new account ("Create account"), import existing accounts ("Import accounts"), or send an invitation for a created account to a new user ("Invite" - see the following figure).



Firstname:

Lastname:

Company Name:

E-Mail:

Figure 5.12 – Postbox, Invite new users

- Enter the data and a valid email address for the new user here, and then click "Send".
 - The recipient will receive an email with the link "Register now".

► When the recipient clicks on this link, they are redirected to the registration page (see "5.6.2 Registration").

i When accounts are created or imported, the account owner must issue the signature release form for each owner as required in the registration process.

Editing account details

Clicking on an account or the "+ Create account" button displays the account information page.

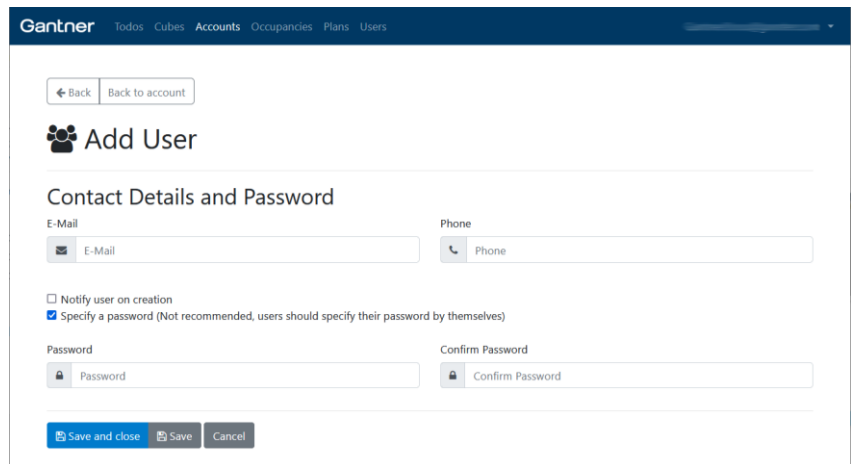
The screenshot shows the 'Account' page for 'Koritnik, Tom'. The page has a dark blue header with the Gantner logo and navigation links: Todos, Cubes, Accounts, Occupancies, Plans, Users. Below the header, there are three buttons: 'Back' (with a left arrow), 'Back to accounts', and a group of three buttons: 'Edit account' (with a pencil icon), 'Assign box' (with a box icon), and 'Delete account' (with a trash icon). The main content area is titled 'Account' and features a user profile icon and the name 'Koritnik, Tom'. Below this, there are two columns of information. The left column contains: Name (Koritnik, Tomaz), Company (Gantner), Post-Box-ID (2ARS4KL3), Tenant (Gantner), Created (02/21/2019 13:46), and Fixed pickup codes. The right column contains: Subscriptions (Gantner), Created (02/21/2019 13:46), Active (with a 'Deactivate Subscription' button), and No active payment (with an 'Activate Payment' button). Below the main content area, there are two tabs: 'Users' and 'Occupancies'. The 'Users' tab is active, showing a table with columns: E-Mail, Phone, Role, Enabled, and Action. The table has one row for 'Postbox Main User' with a 'Resend reset password email' button in the Action column. An 'Add User' button is located at the bottom right of the 'Users' tab.

Figure 5.13 – Postbox, Account information page

Here, information such as the user's name and company or Postbox ID number are displayed. If fixed pickup codes have been defined, they are displayed beneath "Fixed pickup codes".

The following actions can be performed here:

- "Edit account": Edit the data of the account.
- "Activate/Deactivate Subscription": Here a subscription, i.e., activation for the use of the tenant's boxes, can be activated or deactivated.
- "Activate/Deactivate Payment": The payment function is activated or deactivated here. This is indicated with "Activate Payment" if the payment function is deactivated or with "Deactivate Payment" if the payment function is activated.
- "Add User": Here you can add a new user to the account.



Add User

Contact Details and Password

E-Mail

Phone

☐ Notify user on creation

☒ Specify a password (Not recommended, users should specify their password by themselves)

Password

Confirm Password

Figure 5.14 – Postbox, Adding a user to an Account

Important is the email address that is used to log in to the boxes and via which the user is sent notifications. With the "Specify a password" option, you can define a password for the user. However, this is not recommended because the user should define a password themselves.

- "Users" tab:

Here you can see all users assigned to the account. The role of the user is displayed and also whether the user is currently active ("Enabled").

- "Resend reset password email":

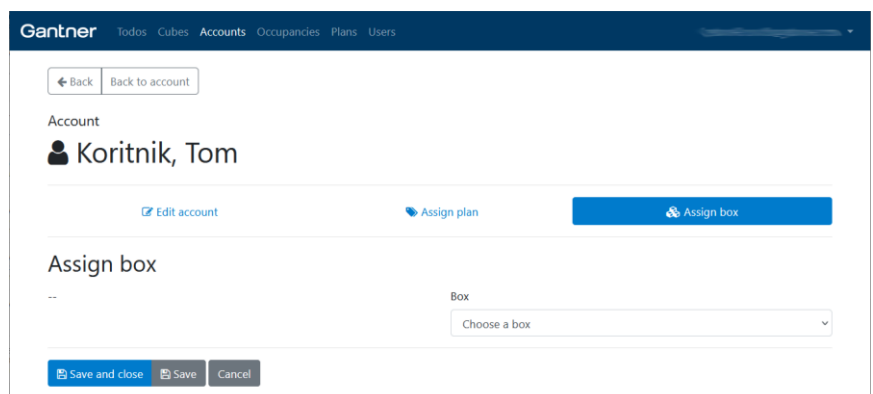
Click on this button to send an email to the user to reset their password.

- "Occupancies" tab:

Listed here are the boxes currently occupied by the users of the account.

- "Assign box":

This function allows you to assign a plan (tenant) or a box to the user and edit the user data. These 3 actions can be selected via the respective field below the user's name.



Account

Koritnik, Tom

Assign box

--

Box

Figure 5.15 – Postbox, Assigning a box to a user

Importing accounts

With the "Import accounts" button, multiple accounts can be imported via a CSV file. The individual columns (data) of the accounts in the CSV file must be separated with ";" to ensure that they are imported correctly. In addition, the file must be UTF-8 encoded.

Import accounts

CSV-Datei wählen Browse

☒ CSV file contains column headers. Do not import the first row.
☒ Update existing accounts.
☐ Delete accounts if they are not in the file.
☐ Notify accounts, that are created during import.
☒ Automatically subscribe newly imported accounts to tenant default plan (Gantner).

Encoding: UTF-8

Continue Cancel

Figure 5.16 – Postbox, Import accounts

- ▶ Click on "Browse" to select a CSV file for import.
- ▶ Click on "Continue".
 - A preview of the import with the columns and accounts in the CSV file is displayed.

Import accounts

☒ CSV file contains column headers. Do not import the first row.
☒ Update existing accounts.
☐ Delete accounts if they are not in the file.
☐ Notify accounts, that are created during import.
☒ Automatically subscribe newly imported accounts to tenant default plan (Gantner).

Encoding: UTF-8

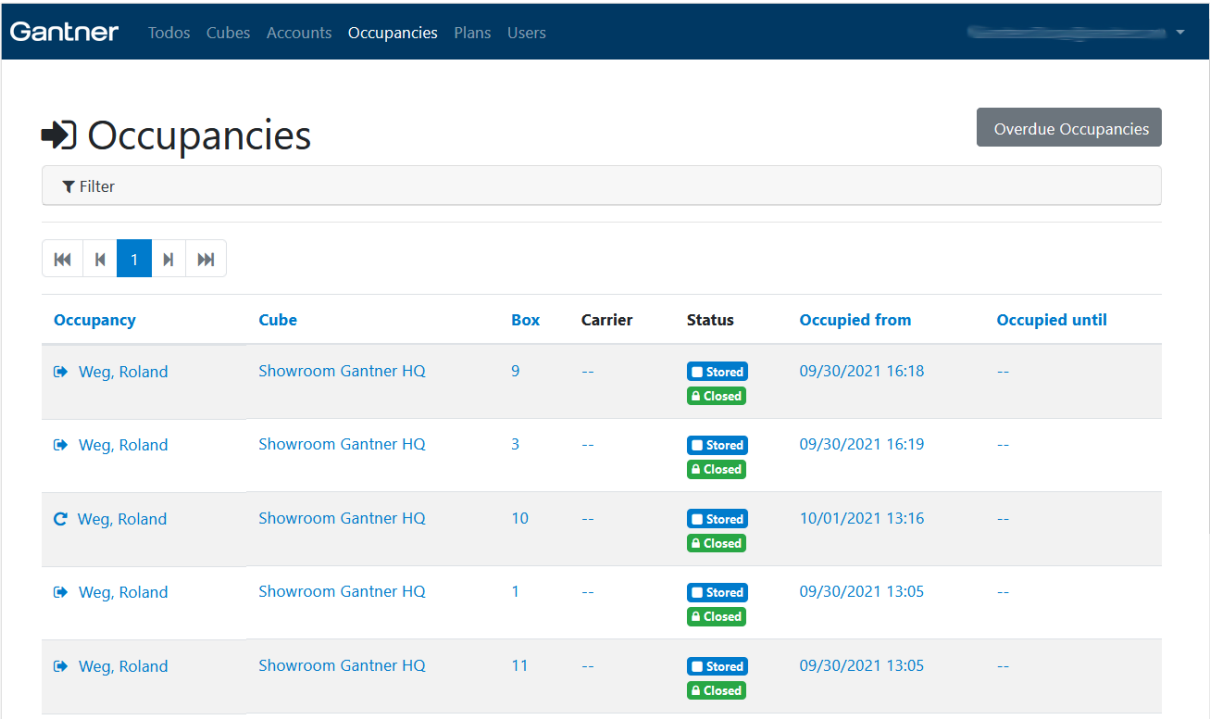
#	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Last Name	First Name	E-Mail	(Don't import)	(Don't import)	(Don't import)
Row 1	Email Address	Name	Surname	Address	ZIP	City
Row 2	mat.mu@gm.com	Mat	Muster	3 City St.	6700	London
Row 3	t.maier@mail.de	Tes	Maier	11 Garden St.	6714	Southampton
Row 4	ang.muller@mail.at	Ang	Muller	1 Park Ave.	6714	London
Row 5	MuLu@gmail.at	Lud	Mustermann	13 Station St.	6780	Liverpool
Row 6	h.m@gmail.at	Han	Meier	77 High St.	6780	Manchester

Import accounts Cancel

Figure 5.17 – Postbox, Import accounts

- ▶ Select the desired settings.
 - CSV file contains column names. Do not import first row:
If the CSV file contains column headers in the first row, this row should not be imported. To do this, select this option. The first column (in the figure "Email address, Name, etc.") is marked in red to indicate that it will not be imported.
 - Update existing accounts:
If this option is selected, existing accounts that are newly imported are updated with the new data. If the option is not selected, the existing data will not be updated.
 - Delete accounts if they are not in the file:
This option deletes all accounts from the Postbox application that are not in the import file but are present in the Postbox configuration. If the option is not selected, these accounts will remain unchanged.
 - Notify accounts that are created during import:
If this option is selected, all users whose accounts are imported and newly created during this process are sent an information message.
 - Automatically subscribe newly imported accounts to tenant default plan (Gantner).
Accounts must be assigned (subscribed) to a tenant. Multiple tenants are also possible. See "5.6.8. Plans – services for account usage". If this option is selected, the default tenant shown here ("Gantner") is used when importing if a tenant is not specified.
 - Encoding:
The character encoding of the CSV files is set here. The default encoding is UTF-8.
- ▶ Click "Next" to perform the import.

5.6.7 Occupancies – current locker information



The screenshot shows the 'Occupancies' page in the Gantner Smart Logistics Hub. The page has a dark blue header with the Gantner logo and navigation links: Todos, Cubes, Accounts, Occupancies, Plans, Users. Below the header, there's a section titled 'Occupancies' with a filter button and a pagination control showing '1' of 1 items. The main content is a table with the following columns: Occupancy, Cube, Box, Carrier, Status, Occupied from, and Occupied until. The table contains five rows of data, all for 'Weg, Roland' at 'Showroom Gantner HQ'. The 'Box' numbers are 9, 3, 10, 1, and 11. The 'Status' column shows 'Stored' and 'Closed' for each row. The 'Occupied from' dates are 09/30/2021 16:18, 09/30/2021 16:19, 10/01/2021 13:16, 09/30/2021 13:05, and 09/30/2021 13:05. The 'Occupied until' column shows '--' for all rows.

Occupancy	Cube	Box	Carrier	Status	Occupied from	Occupied until
Weg, Roland	Showroom Gantner HQ	9	--	Stored Closed	09/30/2021 16:18	--
Weg, Roland	Showroom Gantner HQ	3	--	Stored Closed	09/30/2021 16:19	--
Weg, Roland	Showroom Gantner HQ	10	--	Stored Closed	10/01/2021 13:16	--
Weg, Roland	Showroom Gantner HQ	1	--	Stored Closed	09/30/2021 13:05	--
Weg, Roland	Showroom Gantner HQ	11	--	Stored Closed	09/30/2021 13:05	--

Figure 5.18 – Postbox, “Occupancies”

Displayed here is a list of all boxes currently in use and their associated users.

- Occupancy: Name of the user.
- Cube: Name of the cube that the box belongs to and for which the occupancy is displayed.
- Box: Number of the box.
- Carrier: Name of the delivery company that is being used to carry out the delivery.
- Status: Information on the status of the boxes.
 -  **Stored** An item has been placed in the box for pick up.
 -  **Closed** The box door is closed and locked.
 -  **Picked up** A previously deposited item has been picked up.
 -  **Break-in alarm** An alarm has occurred, e.g., an attempt has been made to break open the box door without authorization.
- Occupied from / until: Date when a delivery item was placed in a box and when it was picked up.

► Click on a line to display information about the occupancy.

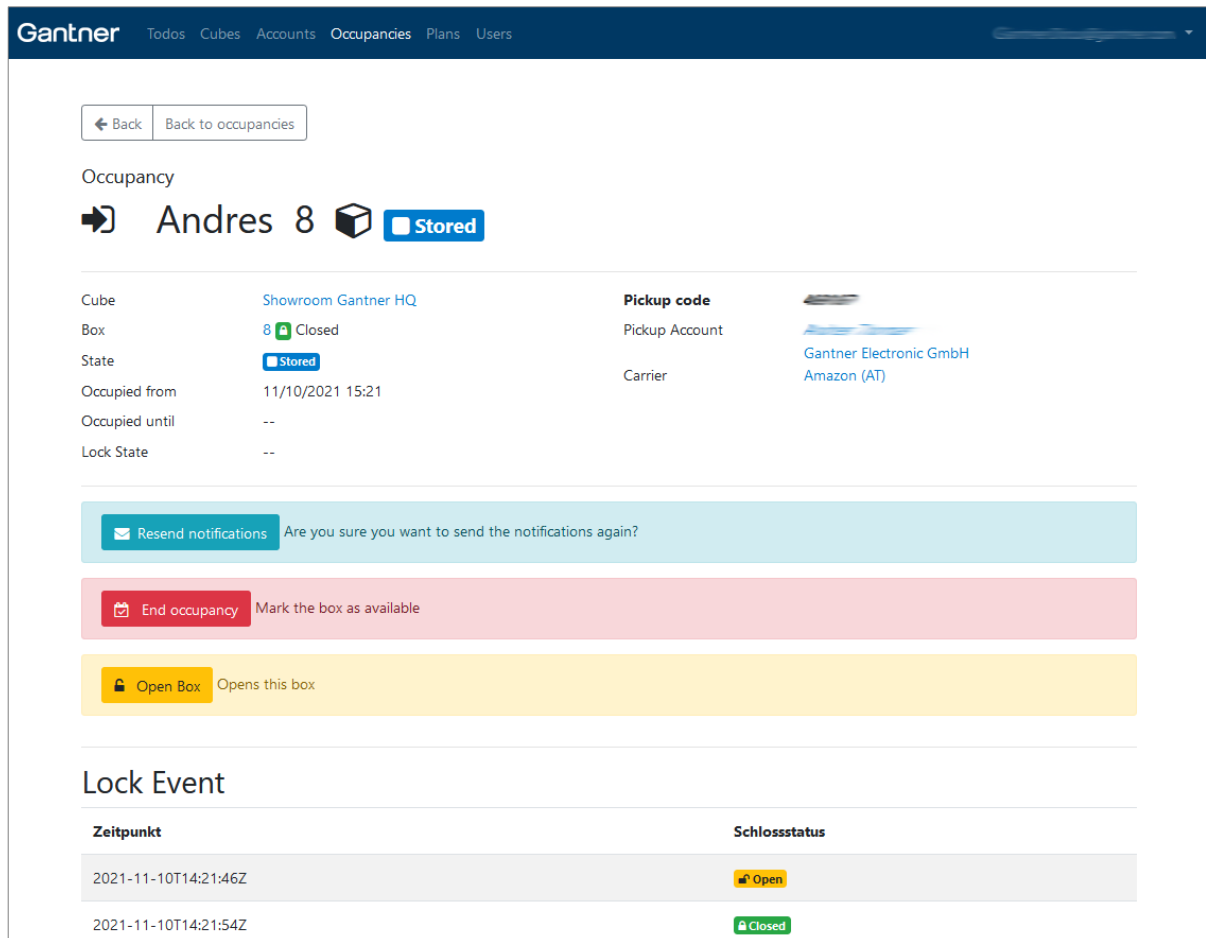


Figure 5.19 – Postbox, Details of an occupancy (Box number 8)

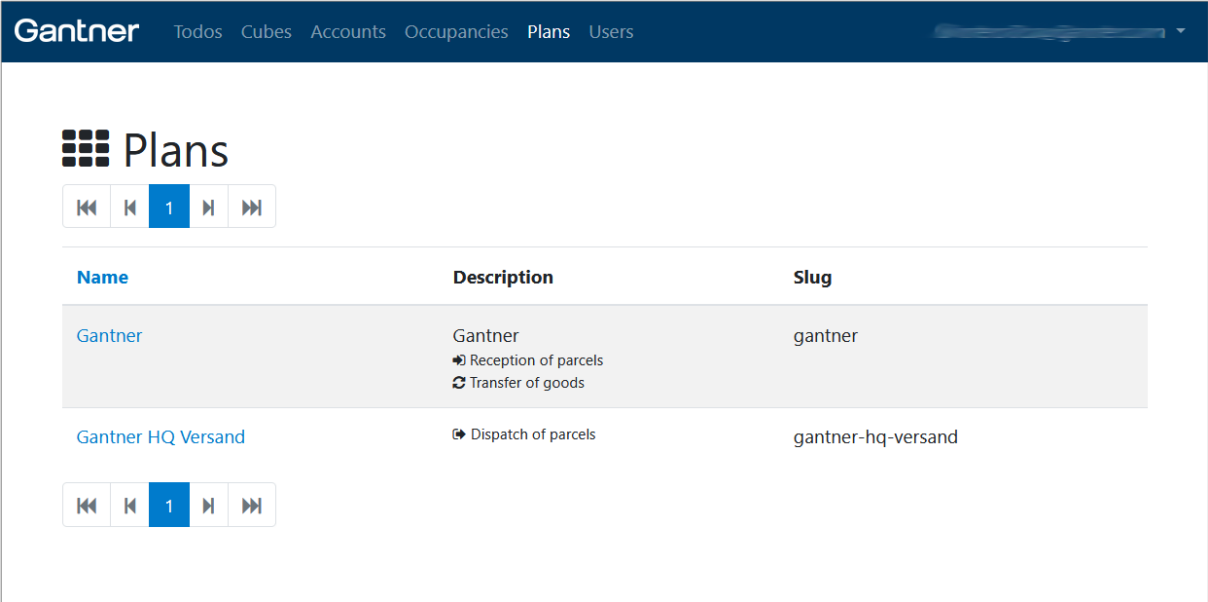
Information about the box occupancy is displayed here. The box number is shown in the header in the "Box" field (here "8"). The account for which the box is reserved is also shown in the header in the "Pickup Account" field. The pickup code is used to open the box at the central terminal.

Displayed in the "Lock Event" list are all the actions that have been carried out at the box.

The following actions can be performed via the colored fields in the center:

- Resend notifications: Click on this button to resend the notification email to the recipient. A confirmation window is displayed asking you to confirm the action.
- End occupancy: This button deletes the occupancy and releases the box. You can choose whether to inform the customer about this. The box is marked as "available" after confirming the action; however, the box door remains locked, and the post item must still be removed from the box (if applicable).
- Open box: Click on this field to open the box. A confirmation window is displayed asking you to confirm the action.

5.6.8 Plans – services for account usage



Name	Description	Slug
Gantner	Gantner • Reception of parcels • Transfer of goods	gantner
Gantner HQ Versand	• Dispatch of parcels	gantner-hq-versand

Figure 5.20 – Postbox, Plans

The plans assigned to each account are listed here. Each plan determines the available services (receiving parcels, sending parcels, transfer of goods) that an account is able to perform. The services are listed for each plan in the "Description" column.

The plans are created by VARIOCUBE during commissioning of the system.

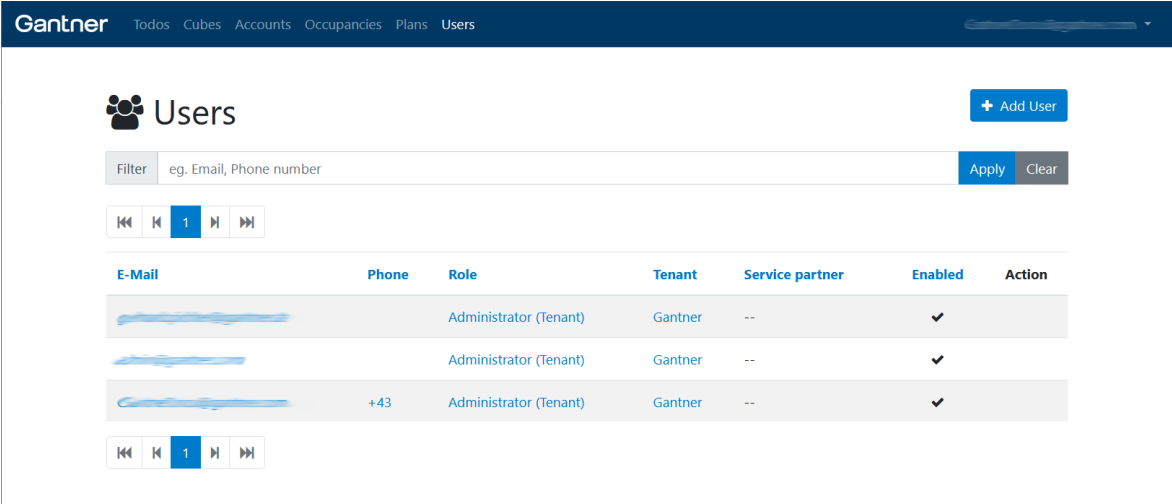
Click on a plan to view the details.



- Name, Description, Slug:	Name, description, and identifier of the plan.
- Tenant:	The name of the tenant that the plan is assigned to.
- Duration amount/unit, Price:	Cost and duration of the plan.
- Taxed amount:	Information about the taxation and duties of the subscription fees.
- Transaction fee name/description:	A name and description for the plan transaction fee (if defined) can be displayed here.
- Terms & Conditions:	Link to the terms and conditions and user manual for the Postbox app. Note: You can edit these links by clicking on "Edit plan".

- Capabilities: Here you can see the functions (receiving parcels, sending parcels, goods transfer) that are included in the plan and can be performed.
 - Allow invoice issuance: Here you can see whether an invoice is allowed to be issued for the plan.
 - Clearing method: Indicates whether the payments should be made via the Stripe connection for a delivery service provider.
- By clicking on "Edit plan", you can enter or edit the links to the GTCs and user manual.

5.6.9 Users – manage administrators and users of the web interface



E-Mail	Phone	Role	Tenant	Service partner	Enabled	Action
[redacted]		Administrator (Tenant)	Gantner	--	✓	
[redacted]		Administrator (Tenant)	Gantner	--	✓	
[redacted]	+43	Administrator (Tenant)	Gantner	--	✓	

Figure 5.22 – Postbox, Overview of users

All users of the Postbox application who use the application administratively are listed here. The identification of the users for login is completed via their email address. The role defines the actions that the user is allowed to perform.

- To display the details of a user, click on the line of the user.
- The details window opens.

The screenshot shows the Gantner user management interface. At the top, there is a navigation bar with the Gantner logo and links to Todos, Cubes, Accounts, Occupancies, Plans, and Users. Below the navigation bar, the user details for 'user-1@company.com' are displayed. The details are organized into two sections. The first section contains fields for E-Mail, Phone, Role, Tenant, and Timezone. The second section contains status fields: Enabled, Locked, Expired, and Expires after. The 'Enabled' field is checked with a tick symbol. The 'Locked' and 'Expired' fields are marked with an 'X' symbol. The 'Expires after' field shows '--'. At the bottom, there is a checkbox for 'Receives maintenance requests/notifications' which is also marked with an 'X' symbol. An 'Edit User' button is located in the top right corner of the user details section.

User	
user-1@company.com	
E-Mail	user-1@company.com
Phone	
Role	User (Tenant)
Tenant	Gantner
Timezone	Europe/Vienna
Enabled	✓
Locked	✗
Expired	✗
Expires after	--
Receives maintenance requests/notifications	✗

Figure 5.23 – Postbox, User details

Shown here in the upper area is the same information as in the overview list.

- E-Mail: The email address is used for user login and identification.
- Phone: This field is optional and can be specified if desired.
- Role: The role determines the rights assigned to the user and which functions they can perform.
- Tenant: The tenant that the user is assigned to.
- Time zone: Displays the time zone (country/city) where the user is located.
- Enabled: When this option is enabled (tick symbol), the user is active and can use the Postbox application. By deactivating the user ("X" symbol), the user is prevented from using the application. Since the user is not deleted in the system, they can easily be reactivated later.
- Locked: When this option is enabled (tick symbol), the user is locked in the system.
- Expired: The authorization for users can be time limited. Here you can see if the authorization for the user is still valid or when the authorization expires.
- Receives maintenance requests/notifications: If this option is enabled, notifications will be sent to the user via email.

- To edit the data for a user, click on "Edit user".
 - The editing page of the user is displayed.

The screenshot shows the Gantner web application interface for editing a user. The top navigation bar includes 'Gantner' and links to 'Todos', 'Cubes', 'Accounts', 'Occupancies', 'Plans', and 'Users'. The main content area is titled 'User' and displays the email 'user-1@company.com' with a user icon. Below this, there are input fields for 'E-Mail' (containing 'user-1@company.com'), 'Phone' (containing 'phone'), and two 'Password' fields. A 'Role' dropdown menu is set to 'User (Tenant)'. There are checkboxes for 'Enabled' (checked), 'Locked', and 'Receives maintenance requests/notifications'. Below these are fields for 'Expires after' (with a calendar icon) and 'Timezone' (set to 'Europe/Vienna'). At the bottom, there are two buttons: a blue 'Save' button and a red 'Delete User' button.

Figure 5.24 – Postbox, Editing user details

The following details are editable here.

- E-Mail: The email address of the user. This is mandatory and must be a valid, active address.
 - Phone: Phone number of the user. This is an optional entry.
 - Password: Enter the password for user login here. The password must be entered in both fields for verification.
 - Role: Define a role for the user. The role determines what rights the user has and the actions they are able to carry out.
 - Enabled: Here you can activate or deactivate the user. A deactivated user is not able to log in until they are reactivated.
 - Locked: When this option is enabled (tick symbol), the user is locked in the system.
 - Receives maintenance requests/notifications: If this option is enabled, notifications will be sent to the user via email.
 - Expires after: Authorizations for users can be time limited. Here, you can enter a date until which the authorization is valid.
 - Time zone: Select the time zone (country/city) that is applicable for the user here.
- Save the information by clicking on "Save".
- If you click on "Delete User", the user is deleted and no longer has authorization.

5.6.10 Tenant - editing settings

A user with the appropriate authorization can view and edit the settings of the tenant to which they are assigned. To do this, proceed as follows.

- Click on the email address at the top right (= currently logged in user).
- Select "Settings" from the pop-up menu.

Tenant Edit tenant

Gantner

Name	Gantner
Description	Gantner HQ, Schruns
E-Mail	[redacted]

Look and Feel

Branding Color	#003863
Logo URL	https://207096.smushcdn.com/1447473/wp-content/themes/towa-theme/dist/img/logo-inverted.png?lossy=0&strip=1&webp=1

Registration

Allow Signup	✓
Public Service	✓
Tenant Registration and E-Mail Template (Slug)	gantner
Split registration into multiple steps (only default template)	✗
Imprint URL	
Privacy Policy URL	
Terms and conditions URL	
Signup Domains	

Settings

Enforce Multi-factor Authentication	✗
Maximum users per account	10
Delete completed occupancies after days	5
Enable fixed pickup codes	✗
Allow Signature Release Mailbox	✗
Max. Failed Login Attempts	5
Language	German

SMS & E-Mail

SMS Enabled	✓
SMS Originator	Gantner
Outbound Email Address	

Notifications

Send pickup reminder after (days)	4
Recurring pickup reminder every (days)	1
Pickup alert after (days)	14

Figure 5.25 – Postbox, Tenant settings

All settings of the current client are displayed here. Most of the settings are not editable but only serve as information for the user.

- Name: Name of the tenant.
- Description: A description text that describes the tenant in greater detail.
- E-Mail: Contact email address for the tenant.
- Look and Feel: The main color and logo for the web interface design can be set individually for each tenant.
- Registration: Here you can see which functions are enabled with regard to registration and other general information, e.g., links to the General Terms and Conditions or legal notice.
- Settings: The values for various settings and functions of the Postbox application are displayed here.
- SMS & E-Mail: The settings for sending SMS notifications.
- Notification: The number of days for notification times are shown here.

Some of these settings can be edited by a user as follows.

- Click on "Edit tenant".
 - The configuration window for the tenant opens.

The screenshot shows the 'Edit tenant' configuration window in the Gantner Postbox application. The window has a dark blue header with the Gantner logo and navigation links: Todos, Cubes, Accounts, Occupancies, Plans, Users. Below the header is a 'Back' button. The main content area is titled 'Tenant' and features the Gantner logo. The configuration is divided into three sections:

- Look and Feel:** Contains 'Branding Color' (a color picker set to #003863) and 'Logo URL' (a text input field containing https://207096.smushcdn.com/1447473).
- Registration:** Contains 'Imprint URL' (a text input field) and 'Privacy Policy URL' (a text input field). Below these is a 'Signup Domains' section with an 'Add domain' button.
- Notifications:** Contains three settings, each with a circular icon and a dropdown menu:
 - 'Send pickup reminder after (days)' set to 4. Below it, a note: 'Send a pickup reminder after the specified amount of days. Minimum 1 day, or leave empty to disable pickup reminders.'
 - 'Recurring pickup reminder every (days)' set to an empty field. Below it, a note: 'Send recurring pickup reminder at the specified interval. Minimum 1 day, or leave empty to disable repeated pickup reminders.'
 - 'Pickup alert after (days)' set to 14. Below it, a note: 'Send pickup alert to the tenant after the specified amount of days. Minimum 1 day, or leave empty to disable pickup alerts.'

At the bottom right of the configuration window are 'Save' and 'Close' buttons.

Figure 5.26 – Postbox, Editing tenant settings

► The following information can be defined:

- Branding Color: Code of the main color displayed on the central terminal screen. The code must be entered in HEX format in the form red-green-blue ("#RRGGBB" -> example dark blue = #003B63).
- Logo URL: Internet address link to a logo in bitmap format. The logo must be accessible via this link.
- Imprint URL: Here you can specify an Internet address to a page that contains the operator's imprint information.
- Privacy Policy URL: Here you can specify an Internet address to a page that contains the privacy policy information of the application or operator.
- Signup Domains: The "Add domain" field allows you to enter one or more email domains that may be used during registration. For example, you can specify that a user may only register using a company domain email such as "company.com" or similar.
- Send pickup reminder after (days): Here you can enter the number of days after which a first reminder will be sent to the recipient after a delivery has been placed in a box, if the recipient has not yet picked up their delivery. If the field is left empty, no pickup reminder will be sent.
- Recurring pickup reminder every (days): If a pickup reminder has been sent and the recipient has not picked up the parcel, another reminder will be sent at regular intervals. Enter the interval here in days. If the field is left empty, no further reminder will be sent.
- Pickup alert after (days): If a delivery has still not been picked up after the number of days specified here, information will be sent to the client. If the field is left empty, no such information will be sent.

► Click "Save" to save the settings.

5.7 Intralogistics configuration (administrator)

To access the configuration of a system, a "user" must be created. The person for whom the user account has been created can then log in to the Intralogistics application using their login name and password. A user can also define additional users.

In the web interface of the Intralogistics application, a user can see the status of the boxes and view the current and completed deliveries with drop-off and pick-up times. The deliveries list can also be exported as an Excel file.

Several terms are used in the Intralogistics application:

- Tenant: A tenant is a system operator of a facility. Through the use of tenants, cloud access for system operators is restricted so that each tenant can only see and edit their system and assigned users. Each user must be assigned to a tenant.
- Users: The personnel who manage the cubes. Users can log in to the VC cloud using their username and password.
- Cubes: A cube is a group of boxes, i.e., a local arrangement of a set of boxes that are treated as a unit.
- Deliveries: A delivery contains the information of a parcel or mail that is being sent or transferred from a sender to a receiver.

5.7.1 Login

If you have access data, log in to the Intralogistics web interface as follows.

- Open a web browser and enter the following link: <https://inhouse.variocube.com/>
 - A pop-up window opens in the browser where you can enter the login data.

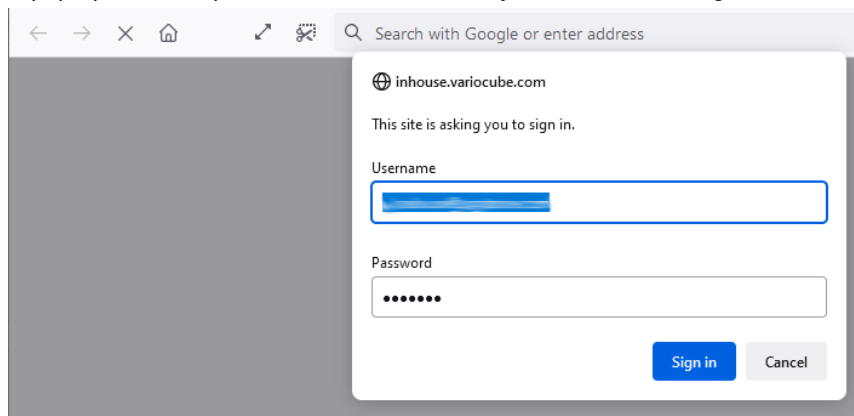
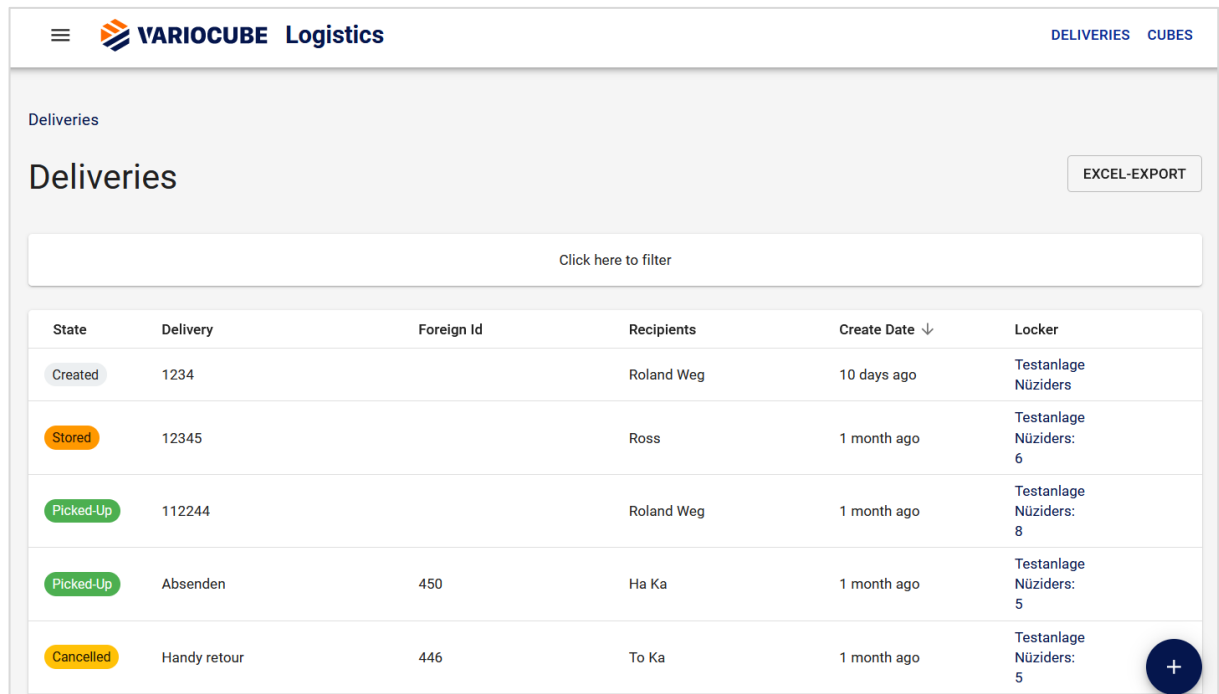


Figure 5.27 – Intralogistics login window

- Enter your username and password and click "Sign in".
 - The clients that can be selected for the user are displayed.
- Select the desired client.
 - The main window of Intralogistics is displayed with the deliveries overview.

5.7.2 Overview of deliveries



State	Delivery	Foreign Id	Recipients	Create Date ↓	Locker
Created	1234		Roland Weg	10 days ago	Testanlage Nüziders
Stored	12345		Ross	1 month ago	Testanlage Nüziders: 6
Picked-Up	112244		Roland Weg	1 month ago	Testanlage Nüziders: 8
Picked-Up	Absenden	450	Ha Ka	1 month ago	Testanlage Nüziders: 5
Cancelled	Handy retour	446	To Ka	1 month ago	Testanlage Nüziders: 5

Figure 5.28 – Intralogistics, Deliveries list

All created deliveries are listed here. Deliveries are used to send parcels or mail to a recipient and for each parcel sending process, a delivery must be created. A delivery contains all the settings necessary for processing the delivery. The following information is displayed in the list:

- State: Indication of the current state of the delivery:
 - "Created": A delivery has been created but not yet deposited or picked up.
 - "Stored": A delivery has been deposited in a box.
 - "Picked-Up": The delivery has been picked up.
 - "Cancelled": The delivery has been canceled.
- Delivery: For each delivery, a name can be entered that describes the delivery.
- Foreign ID: This ID is used to identify each system or group of boxes, which allows quick assignment.
- Recipients: Name of the recipient of the delivery.
- Create Date: Indication of when the delivery was created.
- Locker: Here you can see in which cube (group of boxes) the delivery is located.

- To display or to search for certain information, filters can be set by clicking on the field above the list.
 - The filter criteria are displayed.

Filter

×

LOCKERS

☐ Testanlage Nüziders

STATES

☐ Created
 ☐ Stored
 ☐ PickedUp
 ☐ Cancelled

Fulltext

Figure 5.29 – Intralogistics, Filtering the deliveries list

- ▶ Select the desired location and status (or several) and/or enter a text for the search.
- ▶ Close the window by clicking on "X".
 - The set filter is displayed in the line.

Deliveries

EXCEL-EXPORT

States: Created

State	Delivery	Foreign Id	Recipients	Create Date ↓	Locker
Created	1234		Roland Weg	10 days ago	Testanlage Nüziders

Figure 5.30 – Intralogistics, Set filter

- ▶ Click on the "Excel Export" button to export the list to an XLSX file.
 - Only those displayed deliveries that match the filter settings are exported. Change or delete the filter if you want to export all deliveries.

5.7.3 Creating a new delivery

- ▶ To create a new delivery, click on the plus icon () at the bottom right.
 - The delivery wizard opens, which guides you step by step through the creation of a delivery.

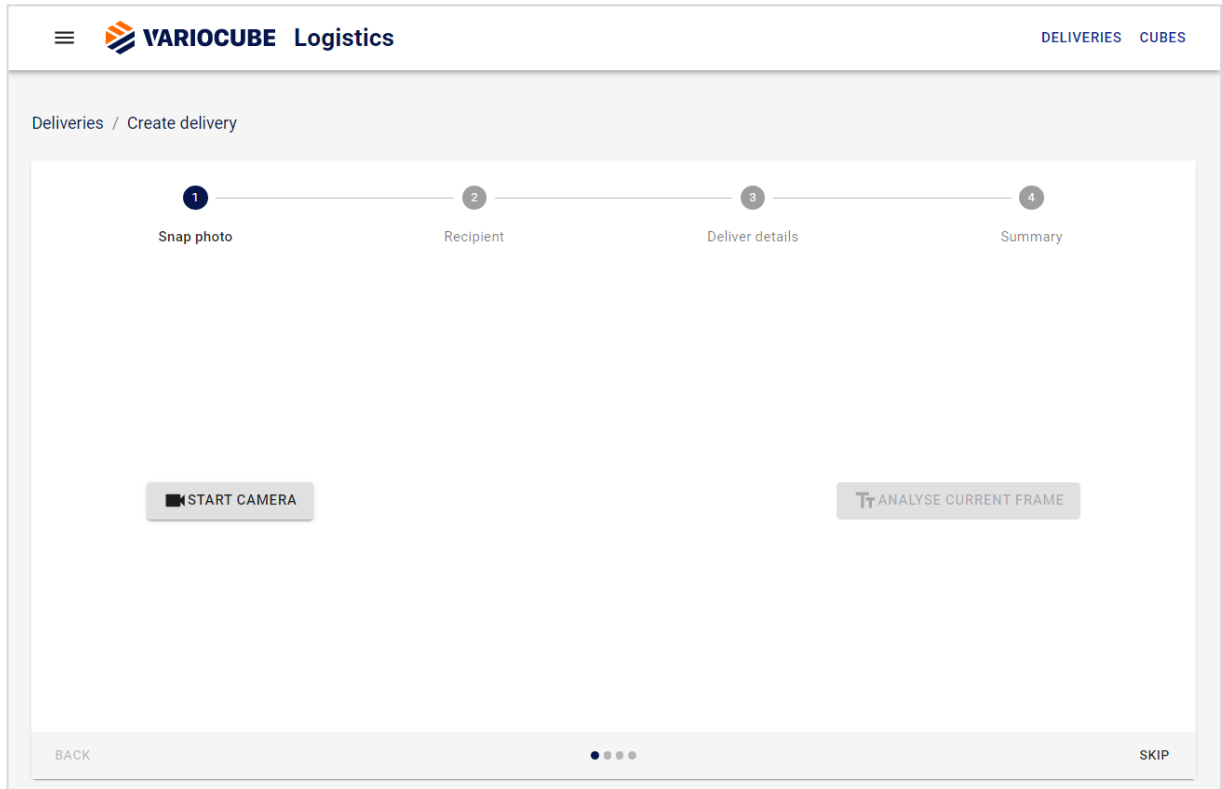


Figure 5.31 – Intralogistics, create new delivery - step 1, take photo

- ▶ You can take a photo for a delivery. To do this, click on "START CAMERA".
- ▶ This step is optional and can also be skipped by clicking on "SKIP" at the bottom right.
 - The page for step 2 is displayed.

The screenshot shows the 'VARIOCUBE Logistics' interface. At the top, there's a navigation bar with a menu icon, the logo, and the text 'VARIOCUBE Logistics'. On the right, there are links for 'DELIVERIES' and 'CUBES'. Below this, a breadcrumb trail reads 'Deliveries / Create delivery'. The main content area features a progress bar with four steps: 1. Snap photo (checked), 2. Recipient (active), 3. Deliver details, and 4. Summary. Under the 'Recipient' step, there are several input fields: a dropdown menu for 'Select Cube' with 'Testanlage Nüziders' selected, a text input for 'Search-terms' with a search icon, a text input for 'Name', and two text inputs for 'E-mail' and 'Phone'. At the bottom of the form, there are 'BACK' and 'NEXT' buttons, along with a small progress indicator showing the current step.

Figure 5.32 – Intralogistics, create new delivery - step 2, recipient details

► Enter the following information here.

- Select Cube: Select a cube from the menu to be used for the delivery.
- Search: One or more terms such as name or email can be entered here to be searched for on the terminal. Several terms are separated by a comma ",".
- Name, E-Mail, Phone: The recipient data can be entered here. The name and email must be entered. The telephone number is optional.

► Click on "NEXT" to proceed to the next step.

- The page for step 3 is displayed.

The screenshot shows the 'Create delivery' interface in the VARIOCUBE Logistics system. At the top, there's a navigation bar with a menu icon, the 'VARIOCUBE Logistics' logo, and links for 'DELIVERIES' and 'CUBES'. Below this, a breadcrumb trail reads 'Deliveries / Create delivery'. A progress indicator at the top of the form area shows four steps: 'Snap photo' (1), 'Recipient' (2), 'Deliver details' (3), and 'Summary' (4). Step 3 is currently active. The form contains several input fields: 'Parcel-Id', 'Condition' (a dropdown menu showing 'Good'), 'Weight', 'Max. storage time', 'Sender', and 'Carrier'. There is also a section for 'Add optional details here.' with a dropdown arrow. At the bottom of the form, there are 'BACK' and 'NEXT' buttons, along with a series of four dots indicating the current step.

Figure 5.33 – Intralogistics, create new delivery - step 3, delivery details

► Enter the following information here:

- Parcel ID: Enter a number for the delivery into this field. With this number, the delivery will be displayed in the overview list.
- Condition: Here you can select one of the following conditions for the parcel.
 - Good (default)
 - Opened
 - Damaged
 - Destroyed
- Weight: Optional. The weight of the delivery can be entered here as additional information.
- Max. storage time: Optional. If you want to limit the storage time of the delivery, you can enter information about the maximum storage time here.
- Sender: Here you can enter the name or designation of the person who is sending the parcel.
- Carrier: Optional. Name of the transport company.
- Add optional details: Here you can enter additional information for a delivery, e.g., an order number or an identification. This data is optional.

- Click on "NEXT" to proceed to the next step.
- The page for step 4 is displayed.

VARIOCUBE Logistics DELIVERIES CUBES

Deliveries / Create delivery

Progress: Snap photo ✓ Recipient ✓ Deliver details ✓ Summary 4

CUBE	RECIPIENT	
Testanlage Nüziders	Ron Bond	
E-MAIL		
ronbond@companyABC.com		
CARRIER	PARCEL-ID	SENDER
Post	123456789	Ron
CONDITION	WEIGHT	MAX. STORAGE TIME
Good	12,00 kg	5 hours

☐ Print label

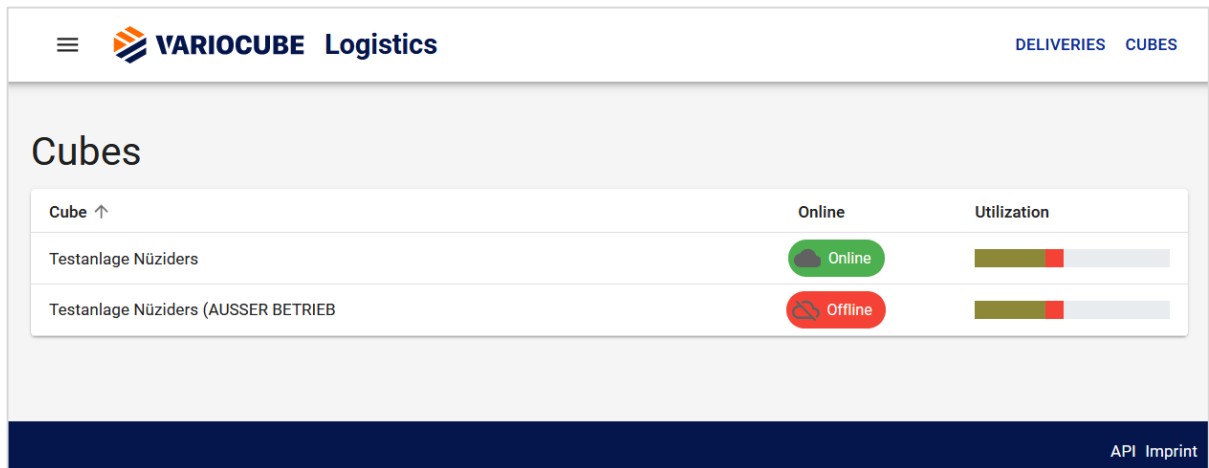
BACK CONFIRM

Figure 5.34 – Intralogistics, create new delivery - step 4, Summary

Here you can see an overview of all the delivery details.

- ▶ You can also go back steps and correct details via "BACK".
- ▶ If you also want to print out the delivery, select the "Print label" option.
- ▶ If the details are correct, confirm by clicking on "CONFIRM".
 - The delivery is added to the delivery list (see "5.7.2 Overview of deliveries").
 - If the "Print label" option was checked, a printer window opens where you can select the printer and print the details.

5.7.4 Overview of the cubes



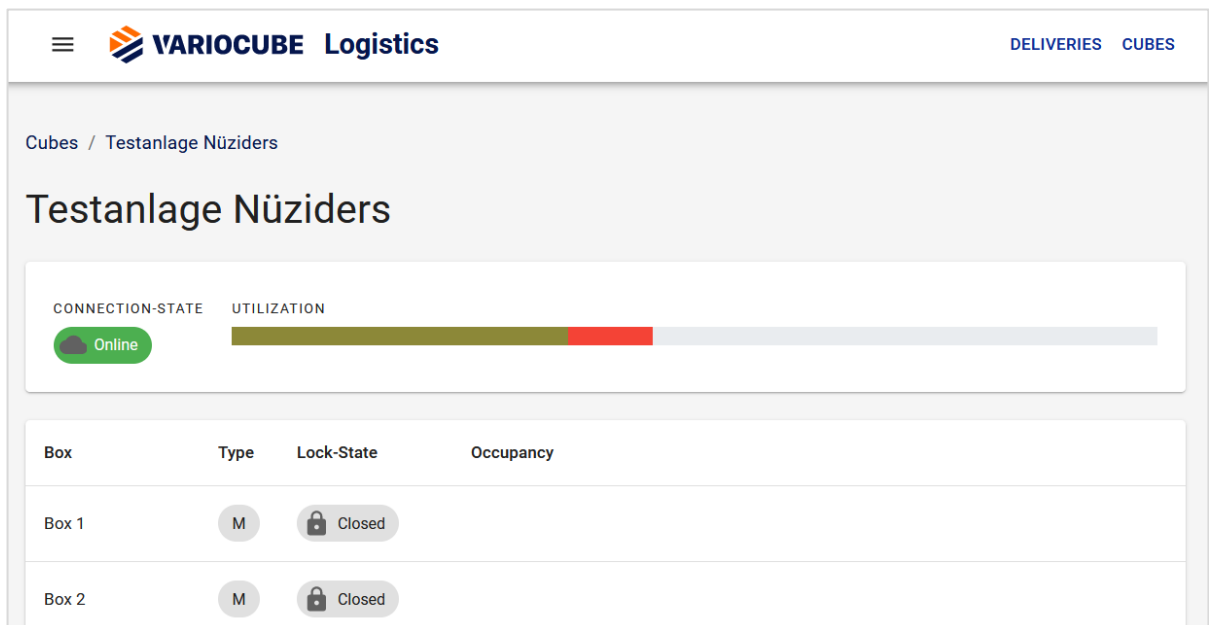
Cube ↑	Online	Utilization
Testanlage Nüziders	Online	
Testanlage Nüziders (AUSSER BETRIEB)	Offline	

Figure 5.35 – Intralogistics, Cubes (locker groups)

All cubes are listed here. You can see whether the connection to the boxes is active ("Online") or whether the connection has been interrupted ("Offline").

The usage of the boxes is indicated with a graphic bar in the "Utilization" column. The brown bar shows the number of occupied boxes, the red bar shows the deactivated boxes, and the gray bar represents the available boxes.

- To display the details and the individual boxes of a cube, click on the cube name.



Box	Type	Lock-State	Occupancy
Box 1	M	Closed	
Box 2	M	Closed	

Figure 5.36 – Intralogistics, List of boxes in a cube

In the upper part, the connection status is displayed (connected = online, not connected = offline) and the utilization status of the boxes (brown bar = occupied boxes, red bar = deactivated boxes and the gray bar = available boxes).

All boxes are displayed in the list. The columns show the following information:

- Box: Number of the box.
 - Type: Size of the compartment (S = small, M = medium, L = large, XL = extra-large).
 - Lock-State: information about the box ("Closed" or "Open"). If the connection is broken, "Unknown" is displayed.
 - Occupancy: Display of the user who is currently occupying the box.
 - Gray background: A box that is displayed with a gray background is disabled.
- If you want to display the details of a box or disable a box, click a box.
- The details window opens.

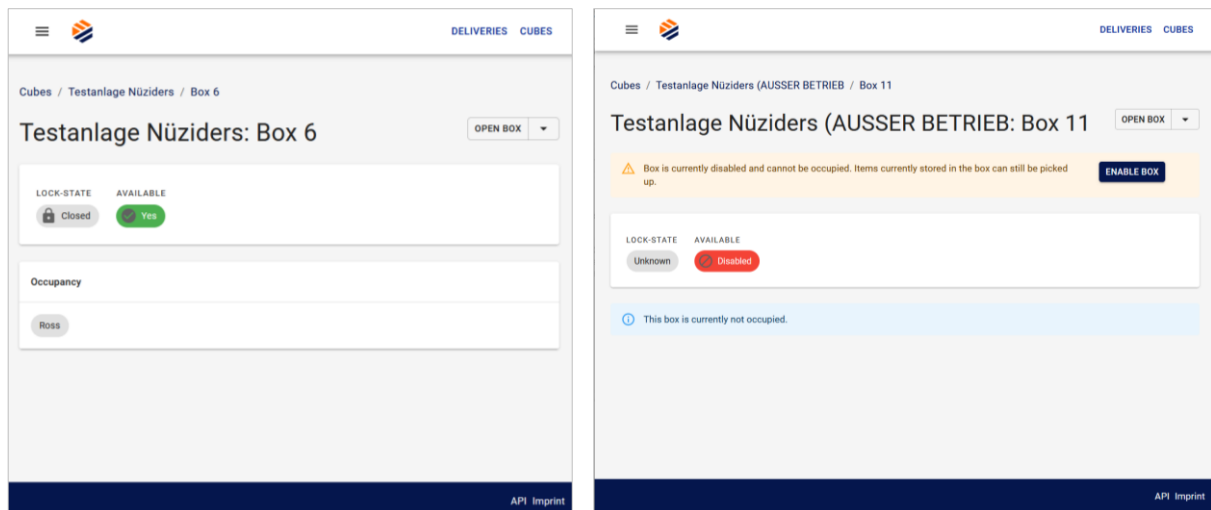


Figure 5.37 – Intralogistics, Box details

- Click on "OPEN BOX" to unlock the box door.
- If you click on the arrow  next to "OPEN BOX", you can disable the box or reenale a disabled box.

5.7.5 Settings

The screenshot shows the 'Settings' page in the VARIOCUBE Logistics interface. The page is titled 'User-Settings Wen, Ronald'. It contains two main sections: 'Access-Code' and 'User-Data'. The 'Access-Code' section displays the code '64573' and a 'GENERATE NEW CODE' button. The 'User-Data' section displays fields for 'NAME', 'E-MAIL ADDRESS', 'USERNAME', and a 'CHANGE PASSWORD' button. Below these is the 'Tenant-Settings: Gantner' section, which includes a 'Tenant' dropdown, 'E-MAIL', 'PHONE', and 'NOTIFICATIONS' (set to 'All on'). It also has 'SPLIT DELIVERIES' and 'PARTIAL PICKUP' (both set to 'Yes') and a 'RETENTION DAYS' section with the text 'Do not automatically delete old deliveries'.

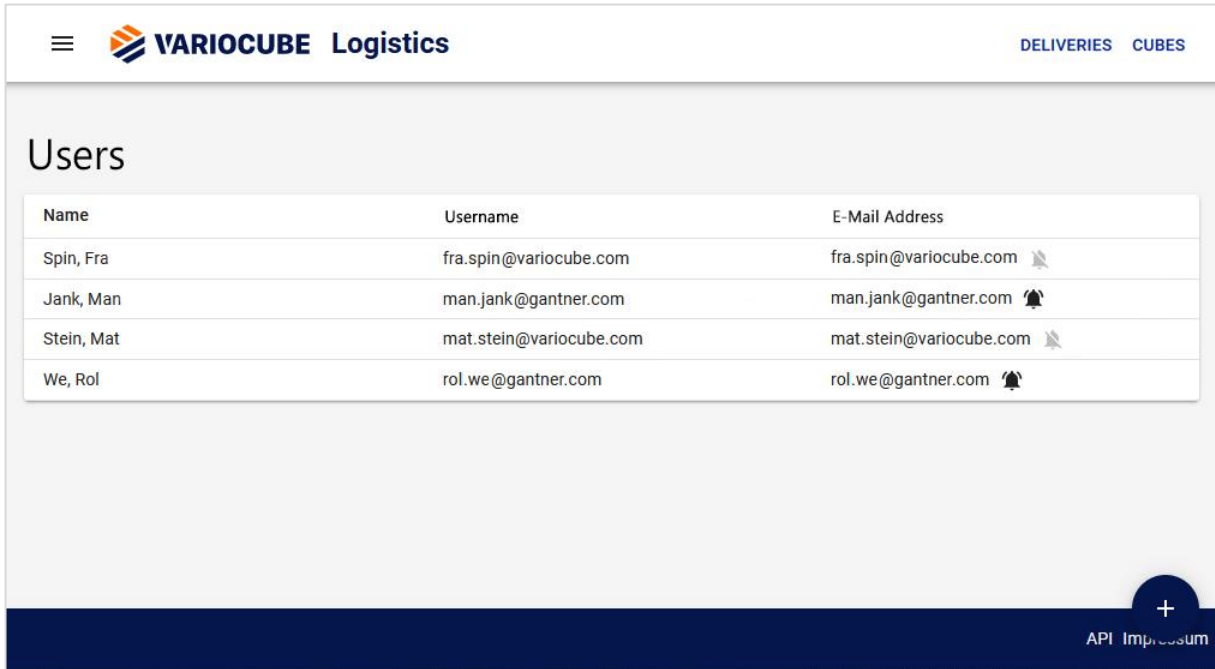
Figure 5.38 – Intralogistics, Settings

On the "Settings page", the data of the currently logged in user is displayed.

- The settings can be accessed via the menu (symbol ≡) with the "Settings" menu item. The following settings are displayed:

- Access code: With this code, the user can insert or send a parcel at the central terminal and view the deliveries and locker list.
Clicking on the "Generate New Code" button will generate a new facility access code and display it in the left text box.
- User data: The email address and a freely definable username of the logged in user are displayed here.
The user password can be changed by clicking on "CHANGE PASSWORD".
- Tenant settings: The current tenant is shown here. Tenants are used to distinguish between the different installations and systems. The users are always assigned to a tenant and can only see or edit the boxes and users of this tenant.
The tenant cannot be changed and is defined by GANTNER or Variocube after installation for the first user.

5.7.6 Users



Name	Username	E-Mail Address
Spin, Fra	fra.spin@variocube.com	fra.spin@variocube.com 
Jank, Man	man.jank@gantner.com	man.jank@gantner.com 
Stein, Mat	mat.stein@variocube.com	mat.stein@variocube.com 
We, Rol	rol.we@gantner.com	rol.we@gantner.com 

Figure 5.39 – Intralogistics, List of users

Displayed here is a list of all users created to use the Intralogistics application.

- The users list can be displayed via the "Users" option in the settings menu (icon top left).

If the bell icon in the email column is active () , the user will receive notifications via email on the operation of the Smart Logistics Hub. However, the notifications can also be deactivated (.

- Clicking on a user opens the settings window where you can edit the user's information.
- You can create a new user by clicking on the  symbol at the bottom right,.

Figure 5.40 – Intralogistics, Create new user

- ▶ Enter the required data, e.g., the username, first name, and last name, of the user here. Important is the email address via which the user is activated.
- ▶ Enter a password for the user. This must be entered twice for verification.
- ▶ Click on "SAVE" to confirm.
- ▶ When a user is edited, the same window is displayed. In addition, the "Wants to receive e-mails" option is displayed. If this option is selected, the user will receive notifications via email on the operations of the Smart Logistics Hub. If not selected, notifications will not be sent.

5.8 Integration in control software (API connection)

For communication via software, the VC Cloud and the Intralogistics application provide a programming interface (API) through which the system can be accessed with appropriate programming. Information on the API functions can be found in the VC Cloud via the following link:

<https://logistics-dev.variocube.com/api/docs/swagger-ui.html>

- Enter the link into a web browser.
 - A website with descriptions of the API functions opens.

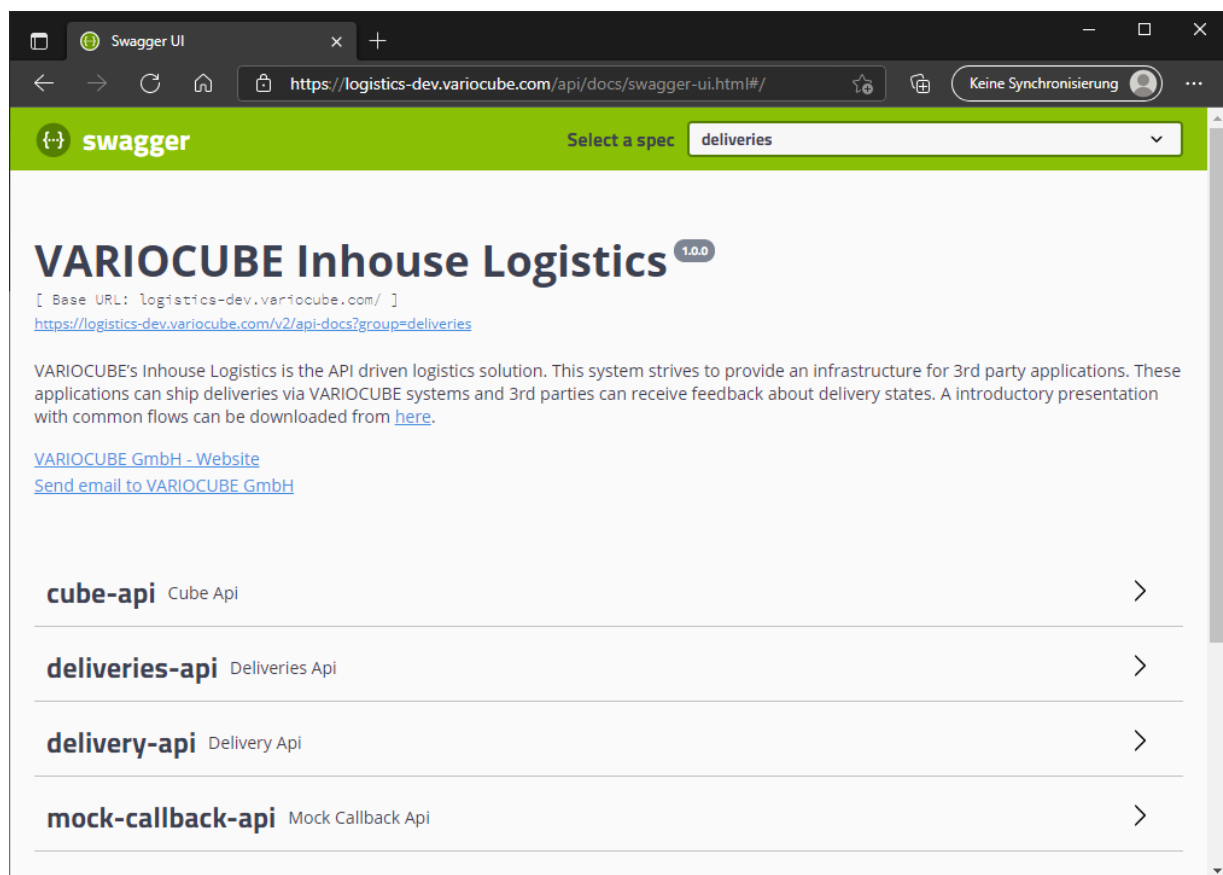


Figure 5.41 – API functions for the Intralogistics application

- Clicking on an API displays the functions it contains.
- Click on a function to expand and collapse the description of the function.

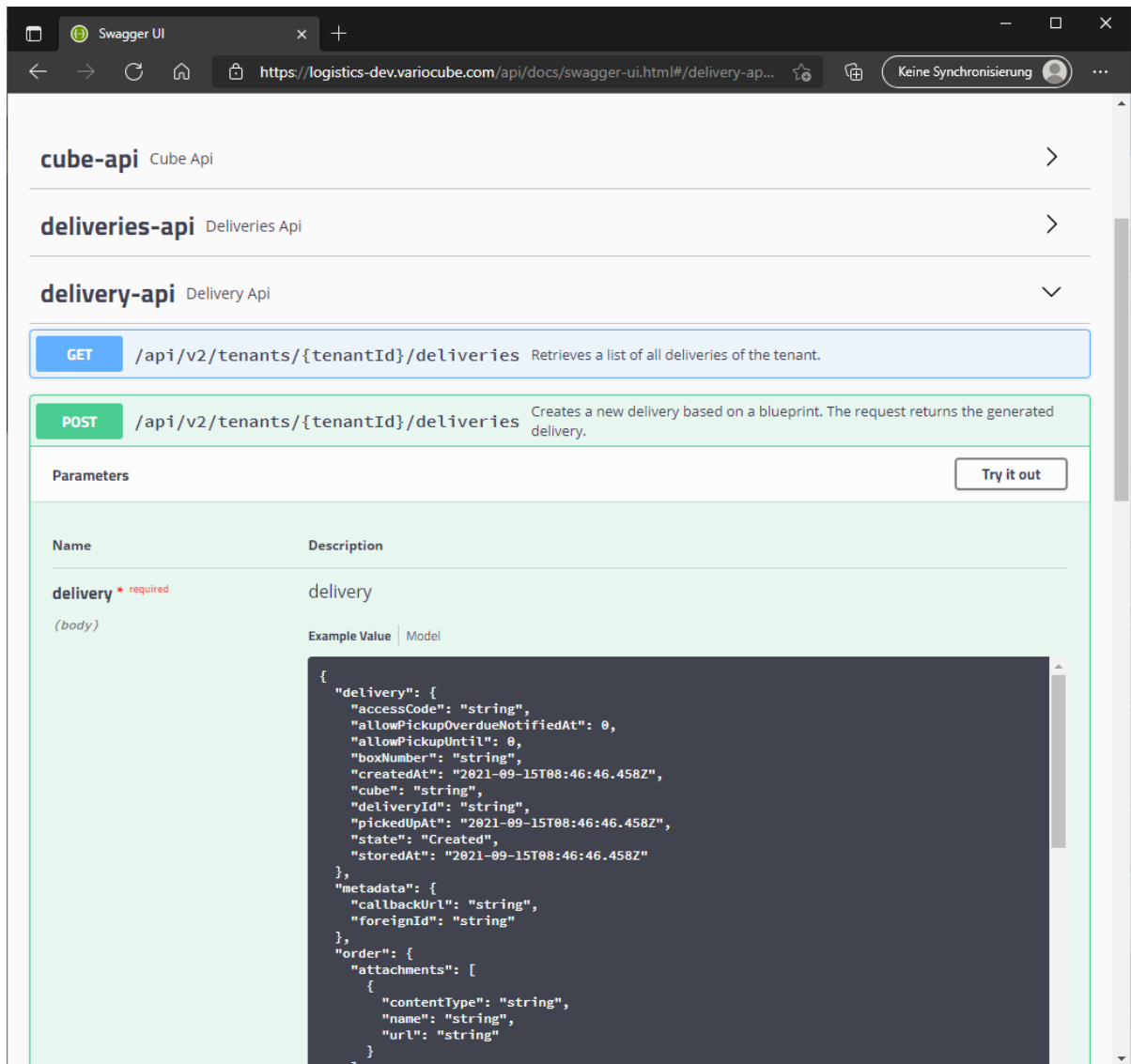


Figure 5.42 – Description of the API functions (example `/api/v2/tenants/{tenantId}/deliveries`)

- By clicking on "Try it out", you can enter the parameters directly into the web interface to test the function.

6 OPERATION

In this chapter, the procedure for sending and receiving deliveries is explained. The operating steps are performed at the central terminal.

6.1 Target group

This chapter is intended for users who want to send and receive parcels and mail. In addition, the operators and system administrators will also find the information to manage deliveries.

6.2 Postbox – account settings

In the account settings, users can be added, and deposit codes and mail items can be created.

- Open a web browser and enter the following link: <https://pobox.app>
 - The website for the Postbox application opens.

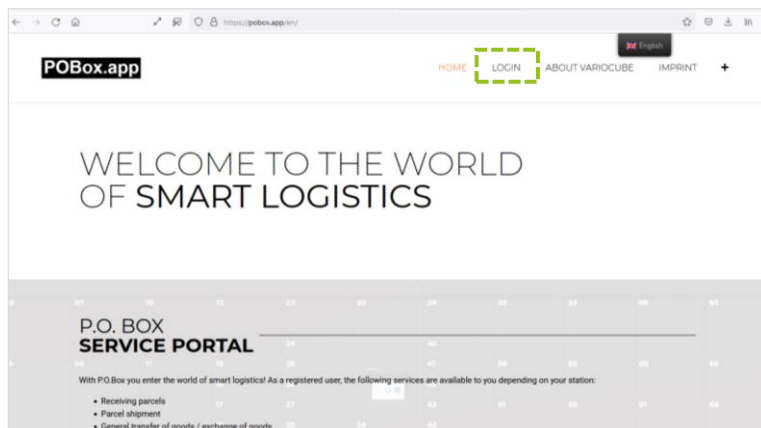


Figure 6.1 – Start screen of the Postbox application

- Select "Login".
 - The login screen opens.

Figure 6.2 – Postbox login window

- Enter your login data (email and password).
- Click on "Login" to open the main window of your account and display your postbox.

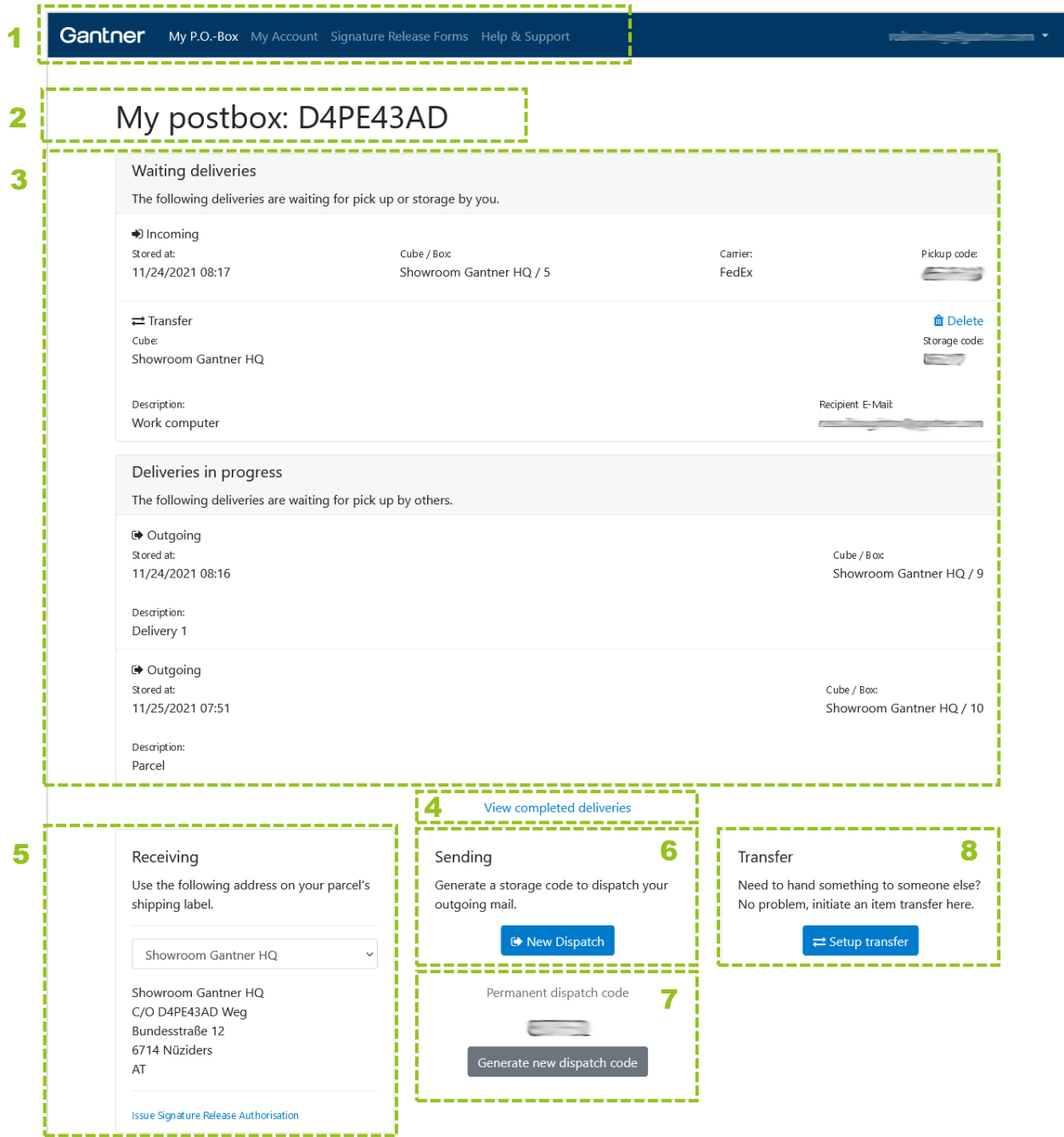


Figure 6.3 – Account settings - Postbox

Here you can see your Postbox number and scheduled deliveries and generate additional deliveries, goods transfers, and shipping codes. The following functions are shown here.

- 1 – Menu:
- Logo: Click on the logo to display the "My Postbox" window.
 - My Postbox: Displays the main window (see above).

- My Account: Settings of your account. Here you can add more users to the account.
- Signature Release Forms: Here you can fill out drop-off permits for the different delivery services.
- Help & Support: Here you can find assistance with operating the software.
- 2 – My Postbox:** The unique postbox number for each account is displayed here. With this, deliveries can be clearly assigned.
You must enter the Postbox number in addition to your receiving address (see 5) for deliveries to public safe deposit boxes.
- 3 – Waiting deliveries / Deliveries in progress:** All scheduled or created deliveries and goods transfers are displayed here. The storage codes needed to place the delivery in a locker are also displayed here.
- 4 – Completed deliveries:** By clicking on this field, you can show and hide the deliveries that have already been completed.
- 5 – Receiving:** Here you can see your reception address and, if several cubes are available, you can select a desired cube. This will then be preset by default for deliveries but can also be changed individually in each case.

When ordering, you must enter your delivery address shown here. Your Postbox number is also important. This is displayed in the delivery address on the screen. As a user, you must always agree so-called delivery authorizations with the respective delivery service provider. With a drop-off permit, you confirm to a shipping service provider that you are allowed to drop off all your deliveries at the parcel station (see "6.2.4 Signature release forms").
- 6 – Sending:** Here you can create a new delivery (see next item).
- 7 – Permanent dispatch code:** If a permanent dispatch code is set for the account, this code is displayed here. Otherwise, you can click on "Generate new dispatch code" to have a code generated automatically. With a permanent dispatch code, you can drop off a parcel at the cube for delivery at any time.
- 8 – Transfer:** Here you can create a goods transfer.

6.2.1 Creating a delivery

If you as a user want to have a parcel delivered externally, you need to create a delivery, use the generated storage code to place the parcel into a box at the selected location, and the administrator of the facility will then be notified to hand over the parcel to a service provider for delivery.

- To create a delivery, click on "New dispatch" in the "My postbox" window.
 - The following window is displayed.

The screenshot shows the 'New Dispatch' form in the Gantner account interface. The header bar includes the Gantner logo and navigation links: 'My P.O.-Box', 'My Account', 'Signature Release Forms', and 'Help & Support'. The main heading is 'New Dispatch' with a double-headed arrow icon. Below the heading, a note states: 'Please make sure that your items are equipped with proper and readable shipping labels. Dispatches without readable address are returned to your postbox. Postage of your dispatches is computed upon posting and billed monthly via your SEPA mandate.' The form contains a 'Gantner HQ Mailroom' label, a '1. Location' dropdown menu with 'Showroom Gantner HQ' selected, and a '2. Description' text input field. A 'Per Transaction fee:' label is also present. At the bottom, there are two buttons: 'Create dispatch' (blue) and 'Cancel' (grey).

Figure 6.4 – Account – New delivery

- ▶ Select the location (cube) for the delivery here.
- ▶ Enter a description for the delivery. This is displayed in the overview list.
- ▶ Click on "Create dispatch".
 - The following window is displayed.

The screenshot shows the 'New dispatch created' confirmation window in the Gantner account interface. The header bar is identical to the previous screenshot. The main heading is 'New dispatch created' with a double-headed arrow icon. Below the heading, a note states: 'Your dispatch was created. Please use the following code to store the item at the cube. The storage code and status of the shipping can be retrieved any time from your account information page.' The form displays the '1. Location' as 'Showroom Gantner HQ' and the '2. Storage Code' as '23361'. At the bottom, there are two buttons: 'Zurück zum Kundenportal' (blue) and 'Weitere Sendung anlegen' (grey).

Figure 6.5 – Account – Delivery created

- ▶ The storage code is used to place the delivery item in a box of the cube and to lock the box door (see "6.3.2. Sending a delivery via a storage code").

6.2.2 Creating a goods transfer

A transfer of goods is basically the same as sending a parcel. The difference is that you can define a recipient when creating a goods transfer. Instead of or in addition to the administrator, the recipient is then notified directly and can use a code to collect the parcel from the box.

- ▶ Click "Setup transfer" in the "My postbox" window.
 - The following window is displayed.

Gantner My P.O.-Box My Account Signature Release Forms Help & Support

⇄ New Transfer

After you created a transfer you will receive a storage code via e-mail and SMS. You can use this code to store items in the VARIOCUBE. Once stored we will automatically send pickup instructions to the recipient.

1. Location
Showroom Gantner HQ

2. Description

3. Recipient
E-Mail
Phone

[⇄ Create transfer](#) [Cancel](#)

Figure 6.6 – Account - Creating goods transfer

- ▶ Select the location (cube) for the goods transfer here.
- ▶ Enter a description for the goods transfer. This is displayed in the overview list.
- ▶ Enter the email address for the recipient and, if desired, the phone number.
- ▶ Click on "Create transfer".
 - The following window is displayed.

Gantner My P.O.-Box My Account Signature Release Forms Help & Support

⇄ New transfer created

The new transfer was created. Please use the following code to store the item at the cube. We will then automatically contact the recipient with pickup instructions.

1. Location
Showroom Gantner HQ

2. Description and Recipient
Computer

3. Storage code
84537

Transfer instruction

Please bring your item to VARIOCUBE at Location **Showroom Gantner HQ** and choose **Dispatch** in the display menu.

Enter your five-digit storage code (**84537**). You can then select a box size that match your item.

One of the available box of the chosen size will open. Store your item and close the box door firmly.

Click **Confirm** on the display.

The system will automatically notify the recipient by e-mail or SMS. You can check the status of your shipment at any time in [your account](#). As soon as the shipment has been picked up, you will automatically receive a confirmation e-mail.

[Back to your account](#) [Create another transfer](#)

Figure 6.7 – Account – Transfer created

- ▶ The storage code is used to place the delivery item in a box of the cube and to lock the box door.
 - The recipient receives an email with a storage code as soon as the mail item is inserted and can then remove the parcel using the pickup code at the box (see "6.3.3 Receiving and collecting a delivery").

6.2.3 Editing the account settings

- Click the "My Account" menu item in the header.
 - The account data page is displayed.

Gantner My P.O.-Box My Account Signature Release Forms Help & Support

My Account

Account data

Post office box number
D4PE43AD

Name
[Redacted]

E-Mail
[Redacted] Phone
[Redacted]

Other Users
Currently no other users can access your account.
You can invite other users any time by clicking "Invite user".

+ Invite User to Account

Send pickup notifications
Only if my account has multiple users

Edit Edit Email & Phone

Service provider

Name
Gantner

Gantner HQ, Schruns

E-Mail
[Redacted]

Subscriptions

Gantner **Active**

Gantner

[Terms, Conditions & Revocation Rights](#)

Signup	02/21/2019 13:46
--------	------------------

Gantner HQ Versand **Active**

Signup	09/13/2021 14:13	Activated	09/13/2021 14:18
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Delete account ⚠ This action cannot be undone.

Figure 6.8 – Account settings

The data of your account is displayed here.

- By clicking on "Invite User to Account", you can add additional users who will then have access to your account.
- By clicking on "Edit" and "Edit Email & Phone", you can edit the account data.
- In the "Subscriptions" section, the added plans are displayed. These are optional.
- In the "Service provider" area, you can see the information and email address of the administrator who manages the boxes. When you send a parcel, this administrator will be notified.
- You can delete your current account via the "Delete account" button after which you will no longer have authorization.

6.2.4 Signature release forms

If you use a public cube where external delivery services can deposit delivery items, you must fill out a signature release form for the delivery service providers. To do this, enter your postbox number (for address information, see "6.2. Postbox – account settings").

- Select the "Signature Release Forms" menu item.
 - The following window is displayed.

Gantner My P.O.-Box My Account **Signature Release Forms** Help & Support

Signature Release Forms

We recommend that you sign the Signature Release Authorisation with various delivery services, which you use. This has the advantage that you explicitly authorize the service providers to deposit their packages in a VARIOCUBE parcel station. The table below will provide you an overview of your current state and the necessary forms.

Delivery services	State	Submitted at	Accepted at	Form
DHL	State Unknown			PDF-Form, Online-Form
UPS	State Unknown			Online-Form
Hermes	State Unknown			PDF-Form
Post AG	State Unknown			PDF-Form, Online-Form
GLS	State Unknown			PDF-Form, Online-Form
DPD	State Unknown			PDF-Form
FedEx	State Unknown			PDF-Form
TNT	State Unknown			PDF-Form
Amazon	State Unknown			

[Back to your account](#)

Figure 6.9 – Signature Release Forms

- Clicking on a link in the "Form" column opens the website or form of the service provider in question. Here you can enter the request for the signature release authorization.
- The specific procedure depends on the service provider.
 - Requests that have been submitted and accepted are displayed in the list with date and time.

6.3 Postbox – instructions for the user

The following sections describe the operation for users at the central terminal to send or receive deliveries. The account settings (see "6.2 Postbox – account settings") and configuration settings ("5.6 Postbox configuration (User or Administrator)") must be correctly set or prepared.

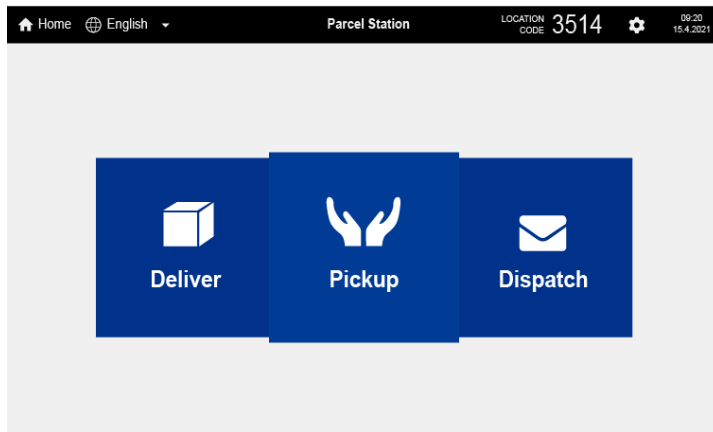


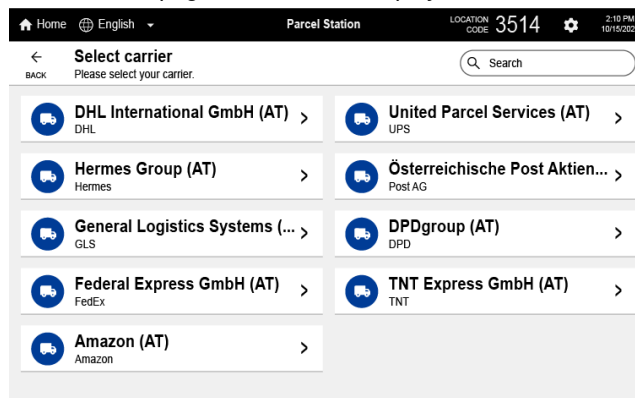
Figure 6.10 – Postbox application on the central terminal

6.3.1 Sending a delivery via a service provider

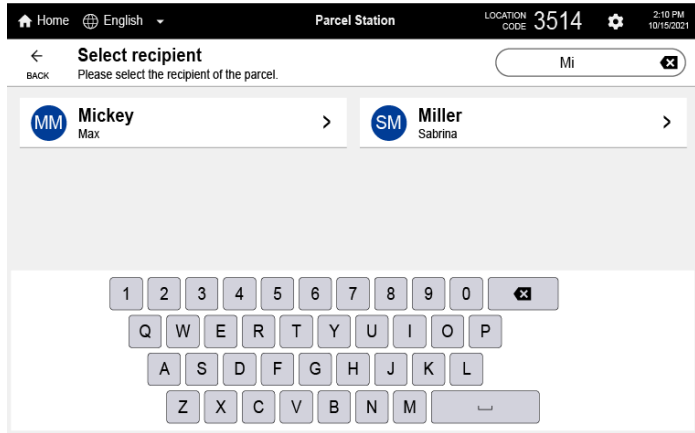


This function is used when a service provider, e.g., FedEx, is to deliver a parcel to a recipient or also for the internal delivery of a parcel by the reception or another user. The procedure at the central terminal and the boxes is as follows for the deliverer (service provider):

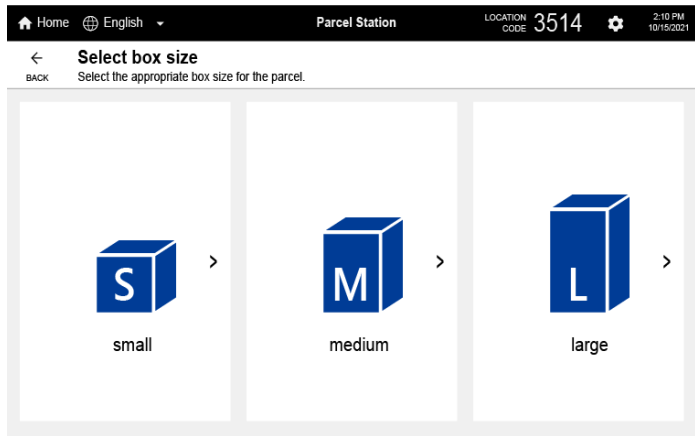
- ▶ Select the "Deliver" option in the menu on the central terminal.
 - The selection page for carriers is displayed.



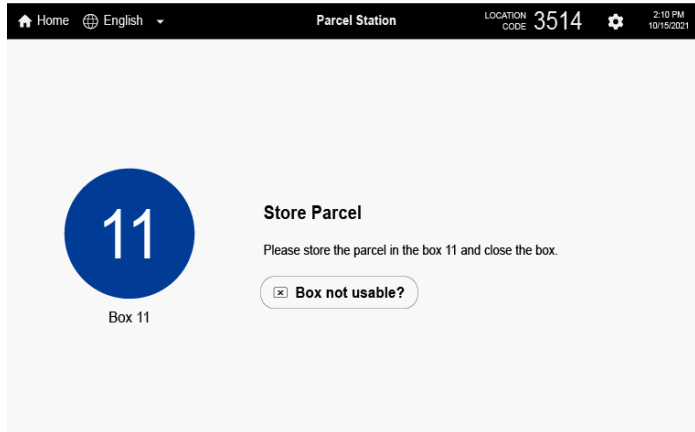
- ▶ Select the desired carrier (e.g., FedEx or DHL).
 - An input field for the recipient's name is displayed.



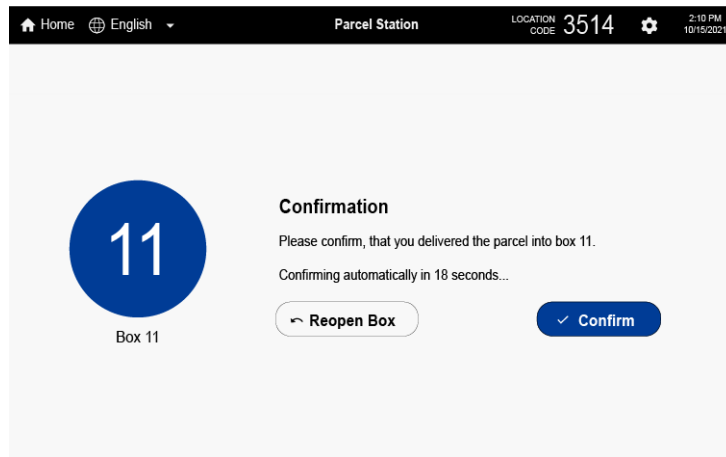
- Select the recipient of the delivery here. The name of the recipient can be entered in the search field for this purpose.
 - The box size selection screen is displayed.



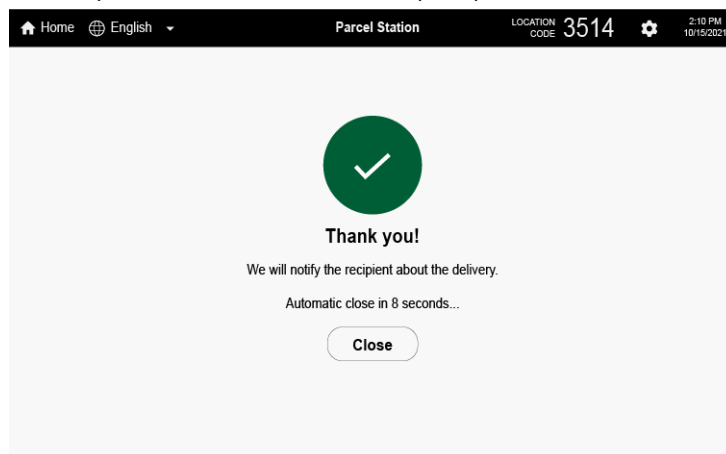
- Select the desired box size here.
 - An empty box of the selected size opens.
 - The box number to be used and a prompt to store the parcel are displayed.



- ▶ Place the parcel into the box and close the box door.
- ▶ If the box cannot be used, press the "Box not usable?" button to display another box.
- ▶ When you have inserted the parcel, press the box door closed.
 - A confirmation is displayed on the screen.



- ▶ If you want to open the box again, press "Reopen Box". The box door opens, and you must then press it shut again.
- ▶ If the delivery has been stored correctly, press "Confirm".
 - A confirmation for the completion of the delivery process is displayed.
 - The recipient receives an email with a pickup code.



6.3.2 Sending a delivery via a storage code



This function is used when a user of the Smart Logistics Hub wants to send a parcel or mail to an external recipient. The user places the delivery into a locker. For each such operation, the administrator ("service provider") of the boxes is notified of the deposit via email. This administrator can then collectively remove the user's stored items at a desired time and transfer them to a service provider for dispatch.

For a user to be able to send mail, a storage code is required. For this purpose, the user can define a dispatch with the desired service provider via their online account on a PC. A separate storage code is automatically generated for each delivery (see "6.2.1 Creating a delivery").

Alternatively, a permanent dispatch code can be generated with which the user can insert deliveries into a box for dispatch at any time (see "6.2. Postbox – account settings"). However, a service provider cannot then be selected.

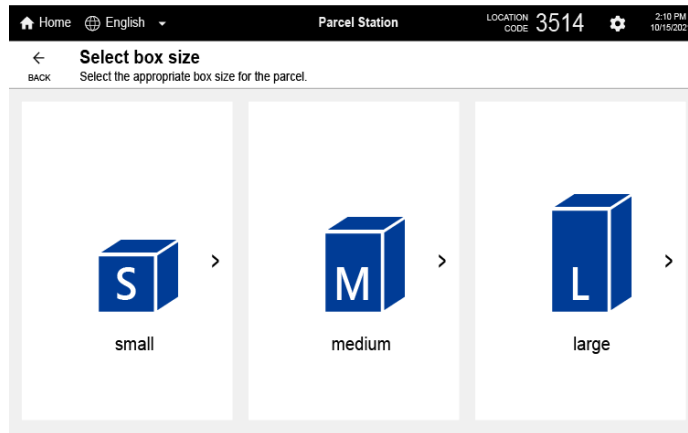
Proceed as follows to send a delivery:

- ▶ Select the "Dispatch" option in the menu on the central terminal.

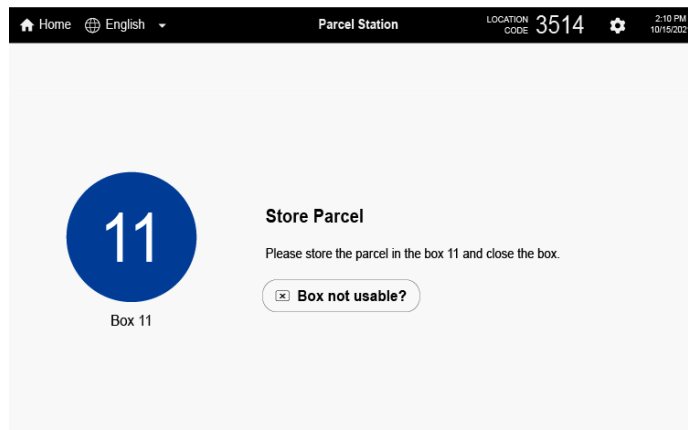
- The following page is displayed.

A screenshot of a mobile application interface. At the top, a black navigation bar contains a home icon, 'Home', a language dropdown set to 'English', 'Parcel Station', 'LOCATION CODE 3514', a settings gear icon, and the time '2:10 PM 10/15/2021'. Below the navigation bar, the screen title is 'Enter storage code' with a back arrow icon and the text 'Please enter your storage code.' Below this, there is a white input field with a small 'x' icon on the right. To the right of the input field is a numeric keypad with blue circular buttons containing the numbers 1 through 9. Below the input field is a blue 'Submit' button.

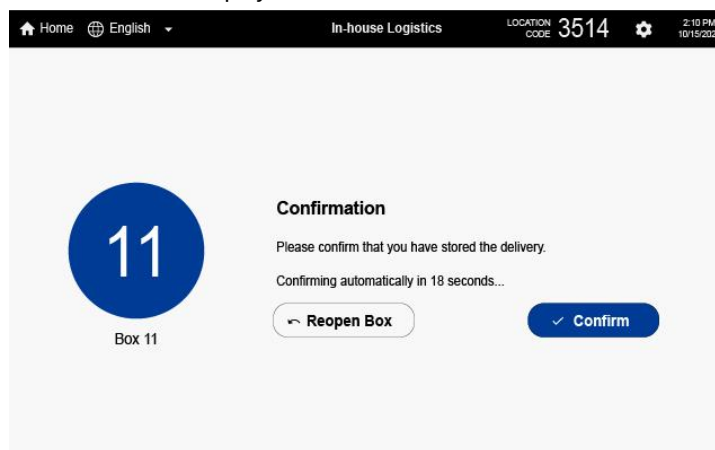
- ▶ Enter the storage code generated for the delivery or the permanent dispatch code.
- ▶ Press "Submit".
 - The box size selection screen is displayed.



- ▶ Select the desired box size here.
 - An empty box of the selected size opens.
 - The box number to be used and a prompt to store the parcel are displayed.

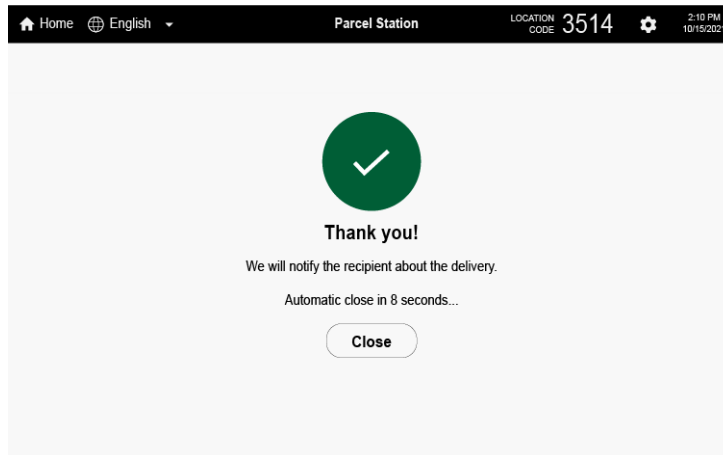


- ▶ Place the delivery in the box and press the box door closed.
- ▶ If the box cannot be used, press the "Box not usable?" option. Another box number is then displayed.
- ▶ Press the box door closed.
 - A confirmation is displayed on the screen.



- ▶ If you want to open the box again, press "Reopen Box". The box door opens, and you must then press it shut again.
- ▶ If the delivery has been stored correctly, press "Confirm".

- A confirmation for the completion of the delivery process is displayed.



- The administrator (service provider) of the cube is informed by email and receives a pickup code for the delivery.
- ▶ The administrator must pick up the delivery and hand it over to a service provider for dispatch.

6.3.3 Receiving and collecting a delivery



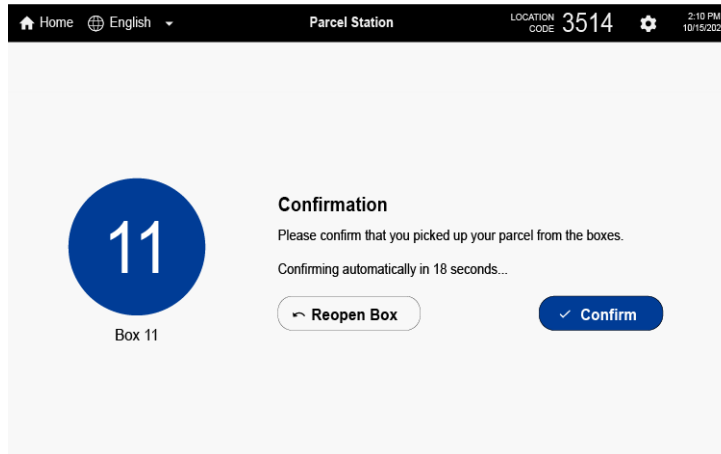
Select this option if you have received a pickup code. In this case, a parcel or mail item has been placed in a safe deposit box for you to collect. Proceed as follows for the pickup.

- ▶ Select the "Pickup" option in the menu on the central terminal.
 - The following page is displayed.

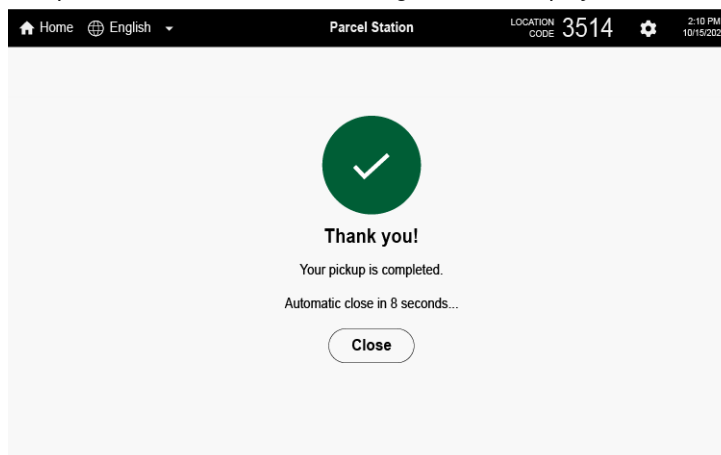
- ▶ Enter your pickup code that you received via email.
- ▶ Press "Submit".
 - The box door containing your parcel is unlocked and springs open.
 - The box number and a prompt to collect the delivery are displayed.

- ▶ Remove the parcel and press the box door shut.

- The following screen is displayed.



- ▶ If you have closed the box door too early, you can open it again within 20 seconds by pressing "Reopen Box".
- ▶ Once you have removed the parcel, confirm this by pressing "Confirm".
 - The process is finished. The following screen is displayed.



- ▶ You can confirm this screen by pressing "Close". Otherwise, the main menu is automatically displayed again after 10 seconds.

6.3.4 Transferring goods

The procedure for transferring goods is the same as for sending a delivery (see "6.3.2. Sending a delivery via a storage code").

The only difference is that instead of creating a delivery in the customer account, a goods transfer using a storage code is created (see "6.2.2 Creating a goods transfer") and in this instance, not only is the administrator informed about the transfer but a recipient can be informed via their email address as well. The recipient is informed automatically by email and can pick up the parcel with the pickup code sent via email.

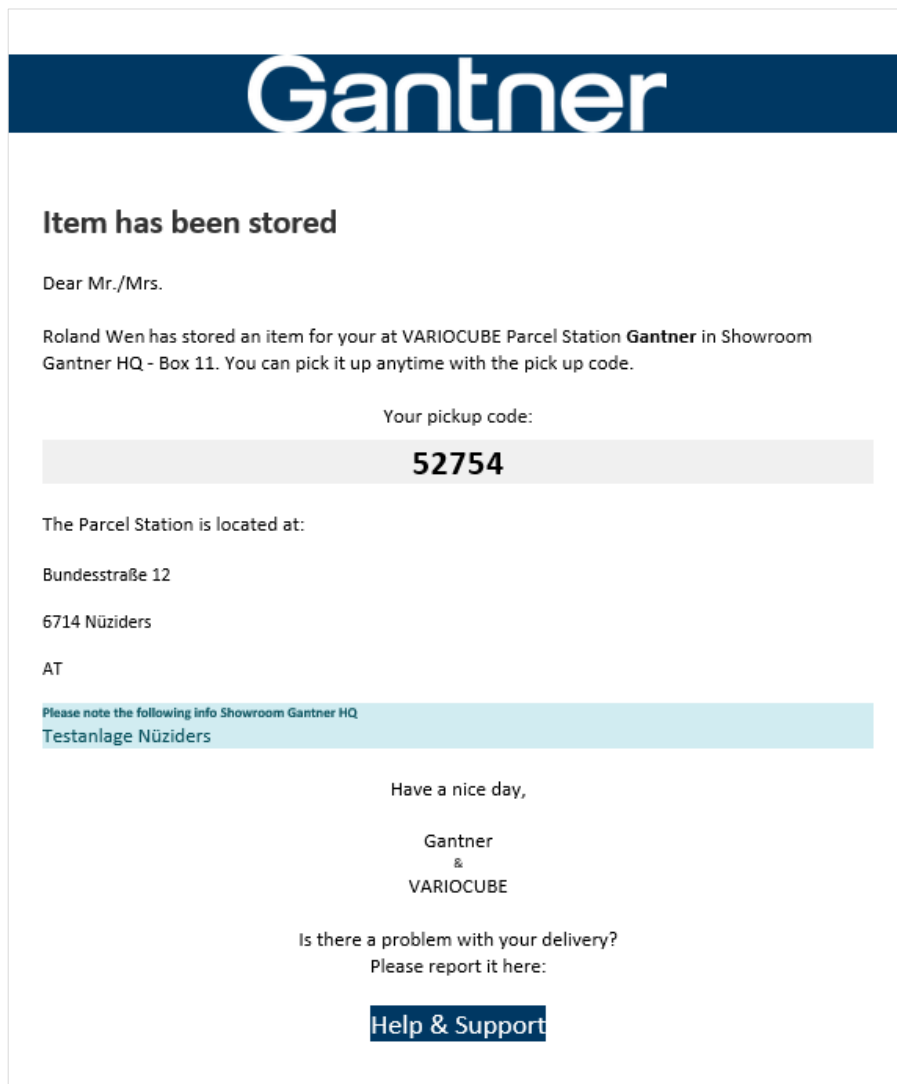


Figure 6.11 – Example email for the collection of a goods transfer

6.4 Intralogistics – instructions for the user

The following sections describe the operation for users at the central terminal who want to send or receive goods using the Intralogistics application. The configuration settings ("5.7 Intralogistics configuration (administrator)") must be correctly defined for this purpose.

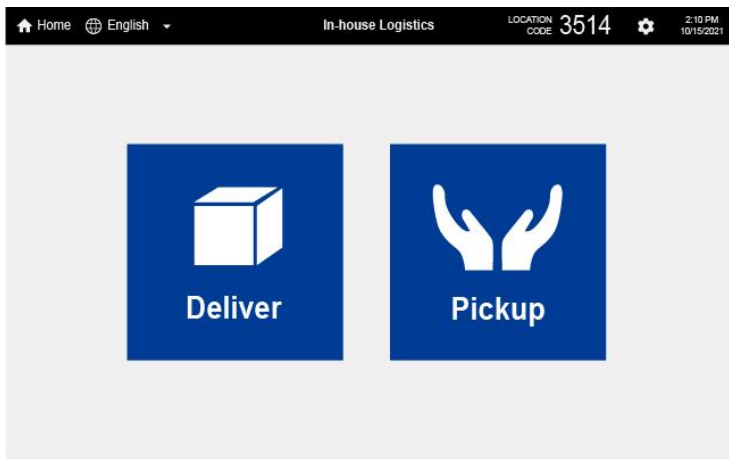


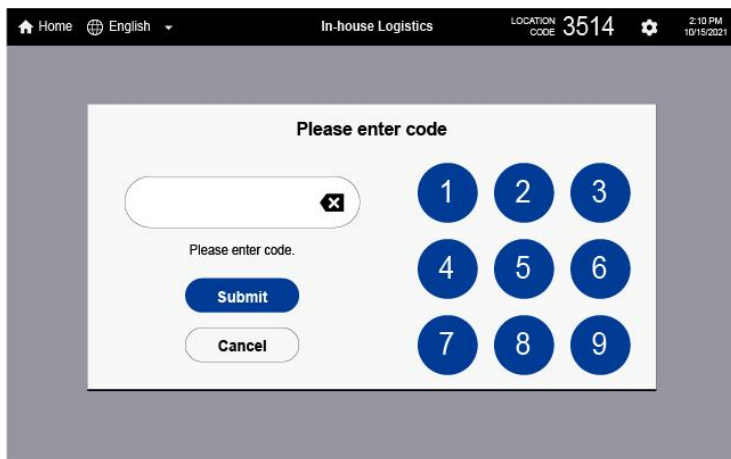
Figure 6.12 – Intralogistics application on the central terminal

6.4.1 Sending a delivery

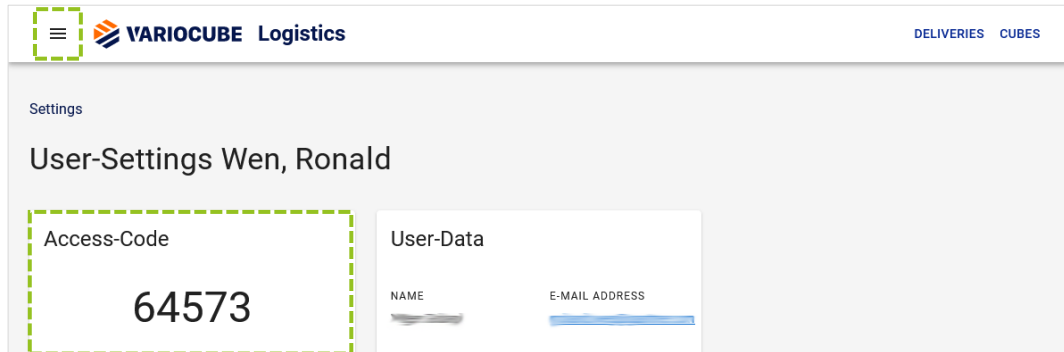


To send mail and parcels, a "delivery" must first be created using the In-house Logistics web interface. In doing so, the recipient is defined with an email address and a phone number (if desired) (see "5.7.3 Creating a new delivery"). The user can now log in to the central terminal using their facility access code and select the delivery.

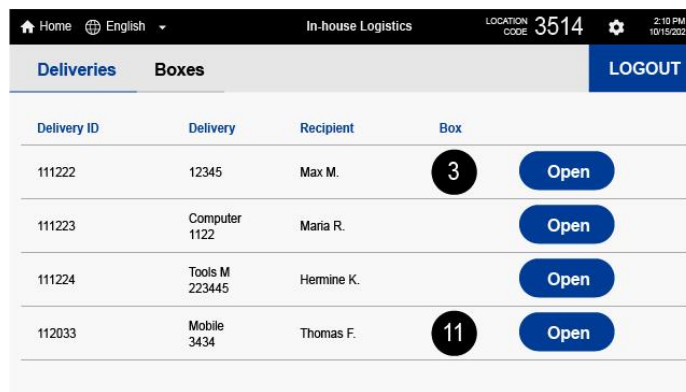
- Select the "Deliver" option in the menu on the central terminal.
 - The access code entry page is displayed.



- Enter your access code here. You can find this in the Inhouse Logistics web interface under your settings (click on "Settings" in the  Menu).



- The list of created deliveries is displayed.

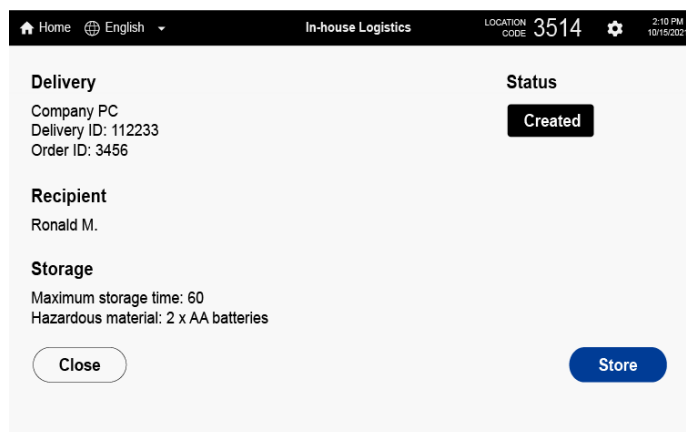


Delivery ID	Delivery	Recipient	Box	
111222	12345	Max M.	3	Open
111223	Computer 1122	Maria R.		Open
111224	Tools M 223445	Hermine K.		Open
112033	Mobile 3434	Thomas F.	11	Open

All deliveries that are still open and also deliveries that have already been carried out or are waiting are displayed here.

If a number is displayed in the "Box" column, the delivery has already placed in this box number and is waiting to be picked up.

- Select the delivery you want to use for sending your delivery items.
 - The delivery information page is displayed.



The details of the delivery, e.g., the delivery number and recipient, are shown on the left.

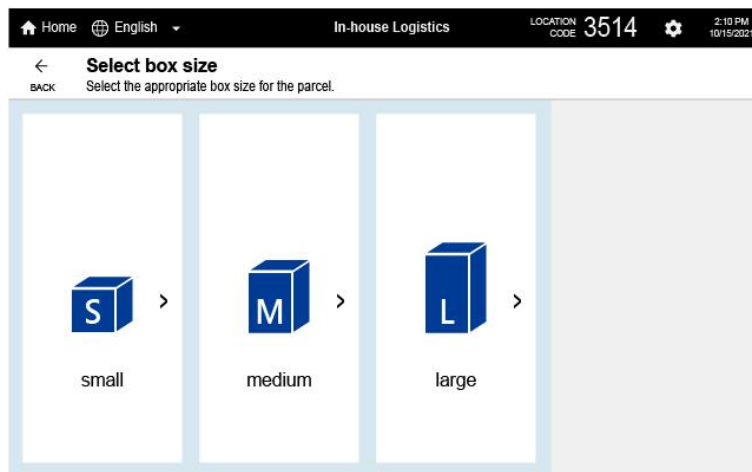
In the "Storage" section, the maximum storage time (in hours) and information for dangerous goods is displayed. These two pieces of information are only displayed if they are defined in the delivery.

On the right, the "Status" of the delivery is displayed:

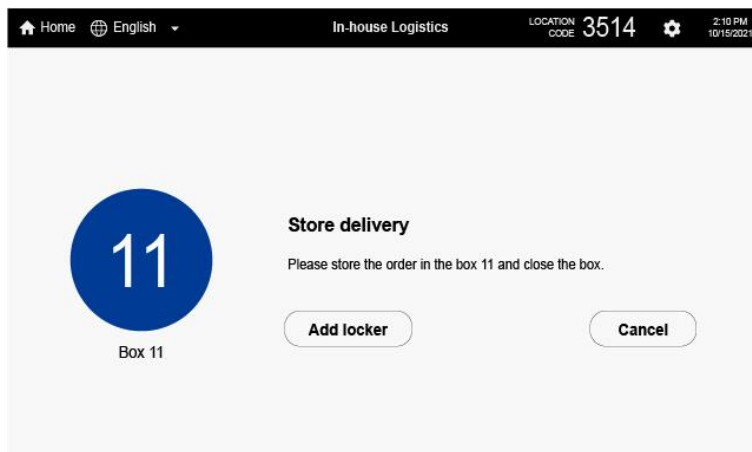
- Created: The delivery has been created and can be used to send mail.
- Stored: Mail or parcels have already been deposited in a locker with this delivery.
- Picked up: A parcel has been sent with this delivery and has already been picked up by the recipient.

If a parcel has already been stored and is ready for pickup, the box number used is displayed on the right.

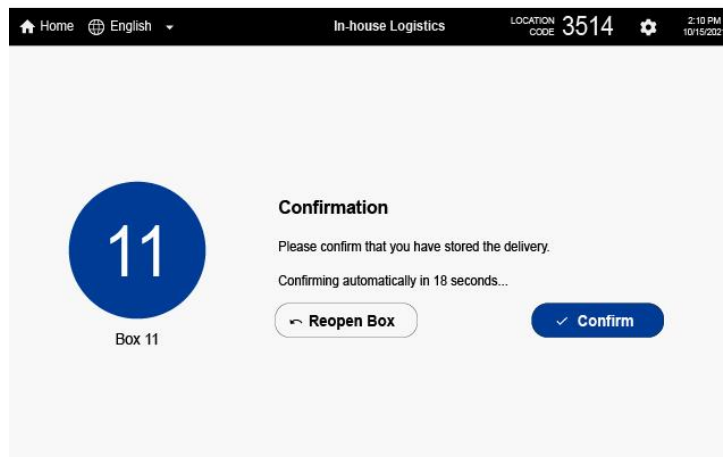
- Select "Store".
 - The page for selecting the desired box size is displayed.



- Select the desired size of the box here.
 - An empty or available box of the selected size is opened.
 - The box number to be used and a prompt to insert the package are displayed.



- ▶ Place the parcel in the box and press the box door closed.
- ▶ If you need another box, e.g., if the delivery consists of several parts, press "Add box". You can then select another box and insert the remaining parcel(s) there.
- ▶ When you have inserted the parcel, press the box door closed.
 - A confirmation is displayed on the screen.



- ▶ If you want to open the box again, press "Reopen Box". The box door opens, and you must then press it shut again.
- ▶ If the parcel is inserted correctly, press "Confirm".
 - A confirmation for the completion of the delivery process is displayed.
 - The recipient receives an email with a pickup code.

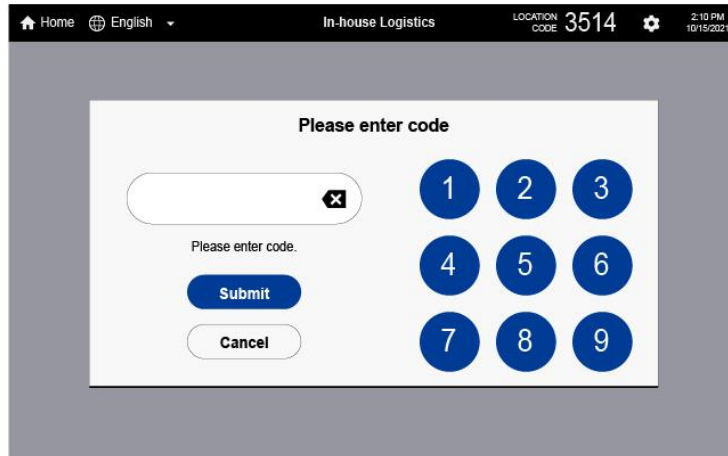
6.4.2 Picking up a delivery



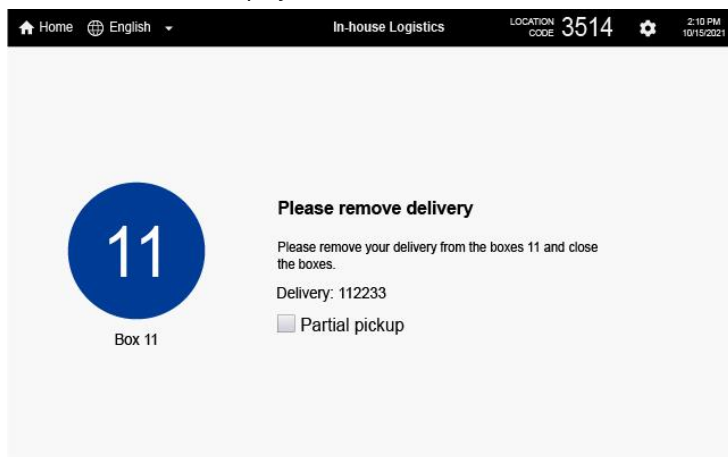
When a delivery is stored in a locker for you, you will receive an email with a pickup code. With this code you can pick up your delivery.

When defining the delivery, you can specify a time (entry in hours) until which the delivery can be picked up. This time is displayed in the email. Before this time expires, pick up the delivery as follows.

- ▶ Select the "Pickup" option in the menu on the central terminal.
 - The access code entry page is displayed.



- ▶ Enter the pickup code here and press "Submit".
 - The box door opens, and a message is displayed informing you that you can remove the delivery. The box number is also displayed.



- ▶ If the delivery consists of several parts and you only want to remove one part, select the "Partial pickup" box. You can then open the box again later using the same pickup code.
- ▶ Remove the delivery and press the box door shut again.
 - The box door is locked again.
 - If "Partial pickup" is not selected, the pickup is completed, and you cannot open the box again with the pickup code. However, if this option is selected, you can open the box door again using the instructions described previously.

6.4.3 Removing an inserted delivery / canceling a delivery



If you have created a delivery and inserted a parcel or delivery for it, but you do not want to carry out the delivery, you can remove the parcel again and cancel the delivery as follows.

- ▶ Select the "Deliver" option in the menu on the central terminal.
 - The access code entry page is displayed

- ▶ Enter your access code here. You can find the code in the Inhouse Logistics web interface under your settings (click on "Settings" in the ≡ Menu).

- The list of created deliveries is displayed.

In-house Logistics			
Home English		LOCATION CODE 3514	2:10 PM 10/15/2021
Deliveries		Boxes	LOGOUT
Delivery ID	Delivery	Recipient	Box
111222	12345	Max M.	3 Open
111223	Computer 1122	Maria R.	Open
111224	Tools M 223445	Hermine K.	Open
112033	Mobile 3434	Thomas F.	11 Open

- Select here the delivery you want to cancel.
 - The delivery information page is displayed.

Home English

In-house Logistics

LOCATION CODE 3514

2:10 PM 10/15/2021

Delivery
 2 x parcels
 Delivery ID: 112233
 Order ID: 3456

Status
 Stored

Recipient
 Roland M.

Box
 7

Storage
 Maximum storage time: 60
 Hazardous material: 2 x AA batteries

Close

Pickup

- Click on "Pickup".
 - The box opens.
- Remove the parcel and close the box door.
 - The delivery is canceled. This is indicated on the delivery information page via the status "Canceled".

Home English

In-house Logistics

LOCATION CODE 3514

2:10 PM 10/15/2021

Delivery
 2 x parcels
 Delivery ID: 112233
 Order ID: 3456

Status
 Canceled

Recipient
 Roland M.

Storage
 Maximum storage time: 60
 Hazardous material: 2 x AA batteries

Close

6.5 System menu

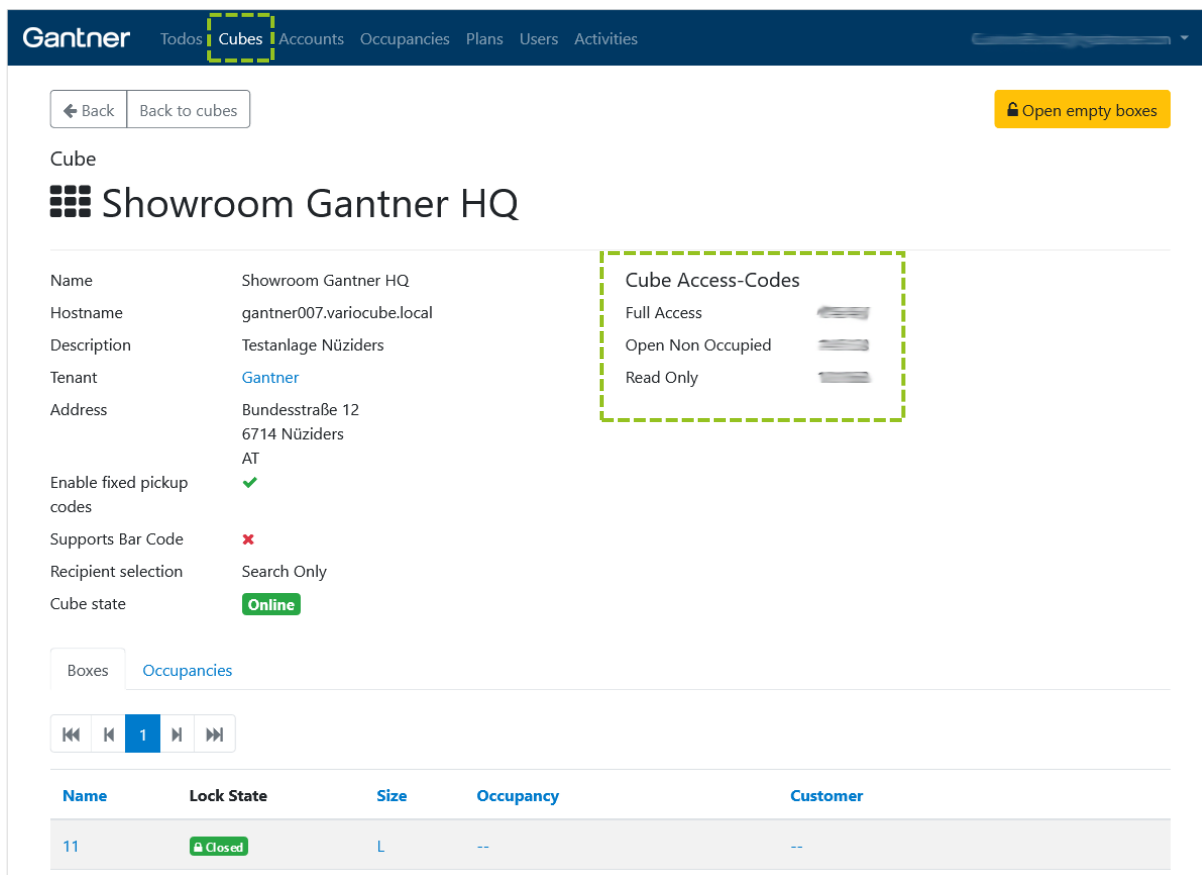
You can use the system access codes to access the system menu on the central terminal. This gives you access to various system functions and allows you to, e.g., open boxes and restart the controllers or the central terminal. In addition, information about the system and connected readers can also be displayed and payments can be tested or made.

IMPORTANT! Keep the system access codes in a secure place protected from unauthorized access. These codes can also be used to open boxes where mail is deposited.

There are three different system access codes with varying authorization levels:

- Full access: All functions and information can be accessed.
- Open non occupied: With this code, not all information can be displayed and only boxes that are not currently occupied with a delivery item can be opened.
- Read only: Only information can be displayed with this code. Opening boxes or other functions are not executable.

You can find the system access codes in the VC Cloud by logging into the Postbox application and opening the respective box group via the "Cubes" menu.



The screenshot shows the Gantner Postbox web application interface. The top navigation bar includes 'Gantner', 'Todos', 'Cubes' (highlighted with a green dashed box), 'Accounts', 'Occupancies', 'Plans', 'Users', and 'Activities'. Below the navigation bar, there are buttons for 'Back' and 'Back to cubes', and a yellow button labeled 'Open empty boxes'. The main content area displays the 'Cube' details for 'Showroom Gantner HQ'. The details include Name, Hostname, Description, Tenant, Address, Enable fixed pickup codes, Supports Bar Code, Recipient selection, and Cube state. A green dashed box highlights the 'Cube Access-Codes' section, which lists three codes: Full Access, Open Non Occupied, and Read Only. Below the details, there are tabs for 'Boxes' and 'Occupancies', and a pagination bar showing '1' of 1 items. At the bottom, there is a table with columns: Name, Lock State, Size, Occupancy, and Customer. The table contains one row with the value '11' in the Name column, 'Closed' in the Lock State column, 'L' in the Size column, '--' in the Occupancy column, and '--' in the Customer column.

Figure 6.13 – Access codes in the Postbox web application

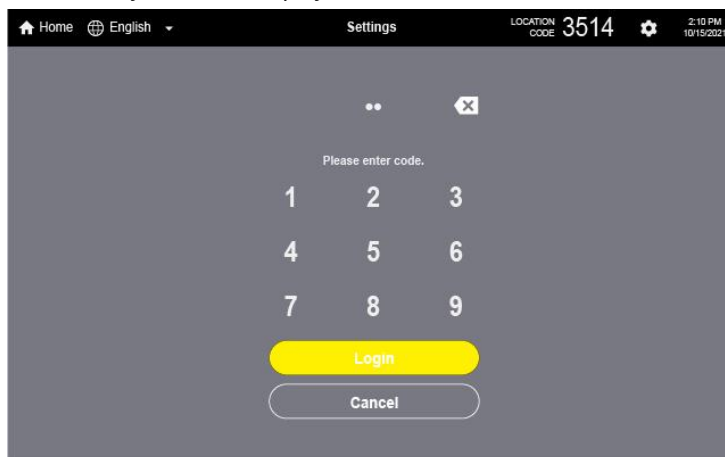
6.5.1 Accessing the system menu

Complete the following steps on the central terminal:

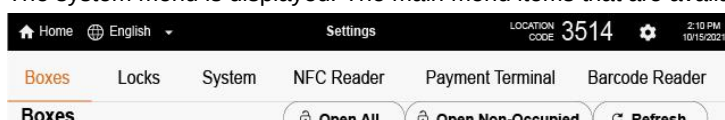
- Click on the "Settings" icon at the top right of the screen.
 - A pop-up window is displayed.



- The connection status is shown here. The left icon indicates whether the controllers are connected, and which version is used. The right icon indicates whether the central terminal is connected to the network or the VC Cloud.
- Click on "Settings" in the pop-up window.
 - A code entry screen is displayed.



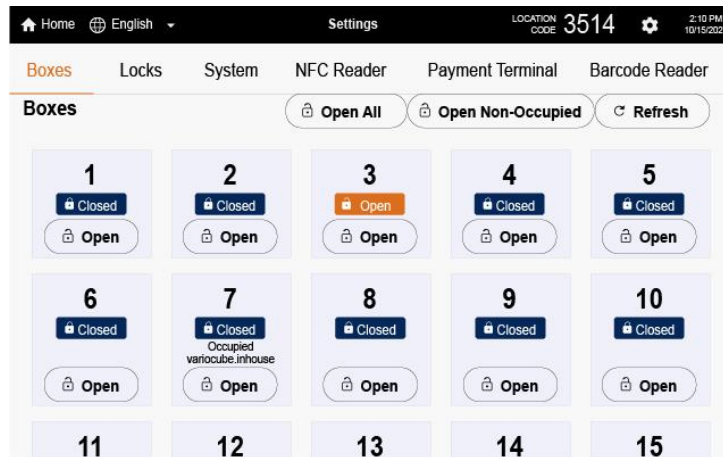
- Enter one of the access codes here and click "Login".
 - The system menu is displayed. The main menu items that are available are shown at the top.



- The following information refers to the access code with the highest authorization level ("full access").

6.5.2 Opening boxes and displaying the status

- ▶ Select the "Boxes" tab in the system menu.
 - An overview of all the boxes created in the system is displayed.



The status of each box is shown here (e.g., "Closed" or "Open").

- ▶ Click on "Open" to open a box. These fields are not displayed for "Read only".
- ▶ With the buttons on the right above the box list, you can open all boxes and/or unlock and open only the unoccupied boxes that are not occupied with a mail item (depending on the authorization level), and have the screen updated.
- ▶ The "Update" button queries the status of each box and displays them anew.

6.5.3 Displaying the lock overview

- ▶ Select the "Locks" tab in the system menu.
 - All locks that are controlled by the central terminal are displayed.

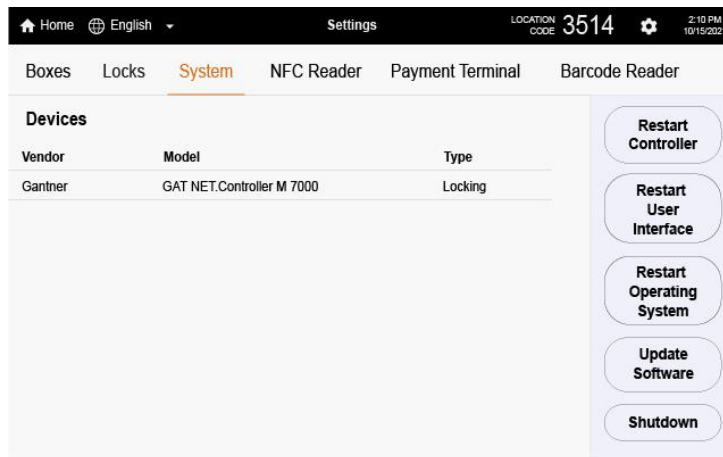
Home English Settings LOCATION CODE 3514 2:10 PM 10/15/2021		
Boxes	Locks	System
NFC Reader		
Payment Terminal		
Barcode Reader		
Lock	Status	Open
1827000071_1	Closed	Open
1827000071_2	Closed	Open
1827000071_3	Open	Open
1827000071_4	Closed	Open
1827000071_5	Closed	Open
1827000071_6	Closed	Open
1827000071_7	Open	Open

- In the "Status" column, you can see whether the lock has locked ("Closed") or unlocked ("Open") the box door.
- ▶ Click on "Open" to unlock a box door and thus open the box.

6.5.4 Execute system overview and system functions (restart, update, etc.)

In the "System" menu, you have various options for restarting the central terminal and the connected controllers, updating the software, or switching off the system. The available functions in the system menu depend on the authorization level that was used to log in with.

- ▶ Select the "System" tab in the system menu.
- The following screen is displayed.



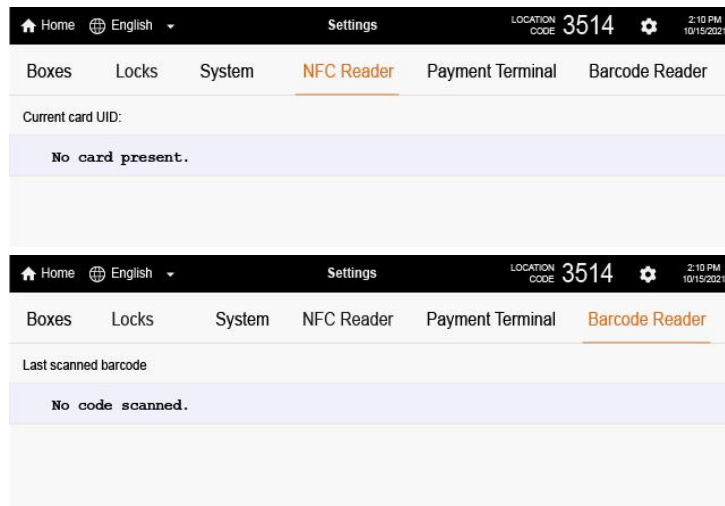
- In the list on this page, you can see the main controllers that are connected to the central terminal.
- The system functions can be selected in the columns on the right.
- ▶ Select one of the following functions in the right column:
 - Restart controller: The connected main controller(s) are switched off and on. This is helpful if a controller does not respond. Often a problem can be solved by doing this. The locked and opened boxes are saved in the controller and the box status is restored after the restart.
 - Restart user interface: This command can be used to restart the graphical user interface of the central terminal. The central terminal is not switched off completely.
 - Restart operating system: This command restarts the central terminal. This is equivalent to switching the terminal off and on.
 - Update software: This function is used to update the operating software of the central terminal. This can be used, e.g., to implement new functions. The new software is downloaded via the cloud.

- Shutdown: Use this command to shut down the central terminal and thus the system. This is useful if the system is to be maintained or devices are to be connected and disconnected. The restart can be performed by carrying out a network reset.

6.5.5 NFC reader (wireless identification) and barcode reader

Readers that can be used for wireless (NFC) or barcode identification can be connected to the central terminal. Information on these readers can be displayed in the system menu.

- Press the "NFC Reader" or "Barcode Reader" tab in the system menu.
 - The following screens are displayed.



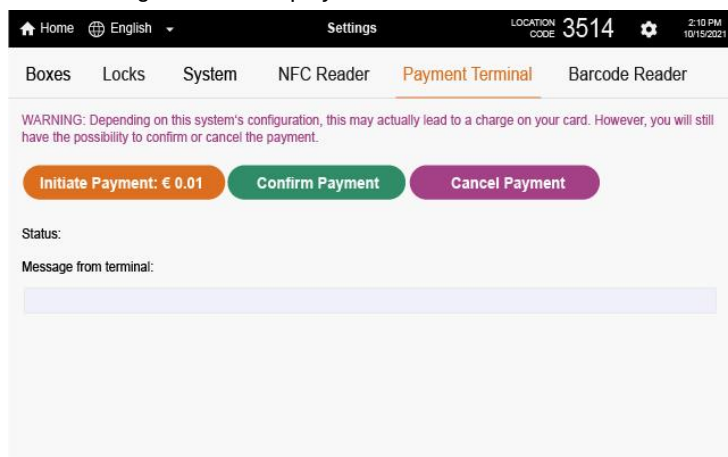
- Now read a barcode or a data carrier using NFC.
 - The read data is displayed on the screen.

6.5.6 Payment terminal

If the payment function is used and a payment terminal is connected, you can test and evaluate the payment function. This function will be used for future applications and has no current function for the Postbox and Intralogistics applications.

- ▶ Select the "Payment Terminal" tab in the system menu.

- The following screen is displayed.



- ▶ Press the displayed buttons to initiate, confirm, or cancel a payment.

- The communication with the payment terminal is displayed in the window below the buttons.

7 TECHNICAL DATA

7.1 Central terminal

Rated voltage:	AC 110 / 230 V
Frequency power supply:	50 / 60 Hz
Power consumption:	max. 50 W
Fuse:	12 A max.
Data carrier:	Micro SD card
Software-Integration:	VARIOCUBE App Host
Host interface:	Ethernet LAN
Connector host interface:	RJ45 port
Antennas:	2 x LTE antennas (magnetic)
Internet connection:	2 x SIM Slot 3G / 4G
Slot 1:	Pre-installed SIM (optional)
Connector:	RJ45 (1x), USB-C (optional), power connector

7.2 GAT NET.Controller M 7020, GAT SMART.Controller S 7020, GAT SMART.Lock 7001

The current technical data of the GAT SMART.Lock 7001 system can be found in the user manual on the GANTNER partner website.

7.3 Central terminal dimensions

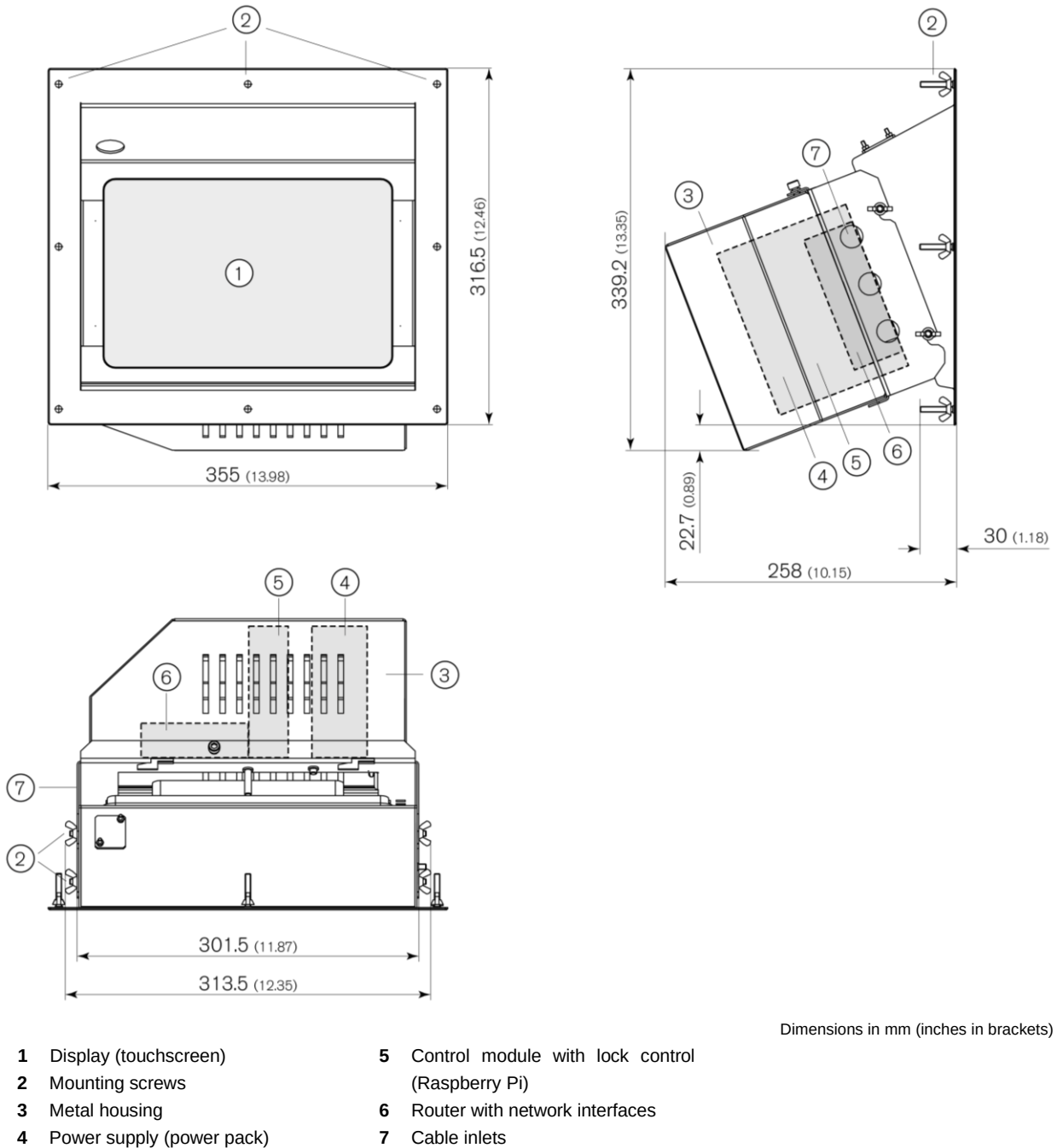
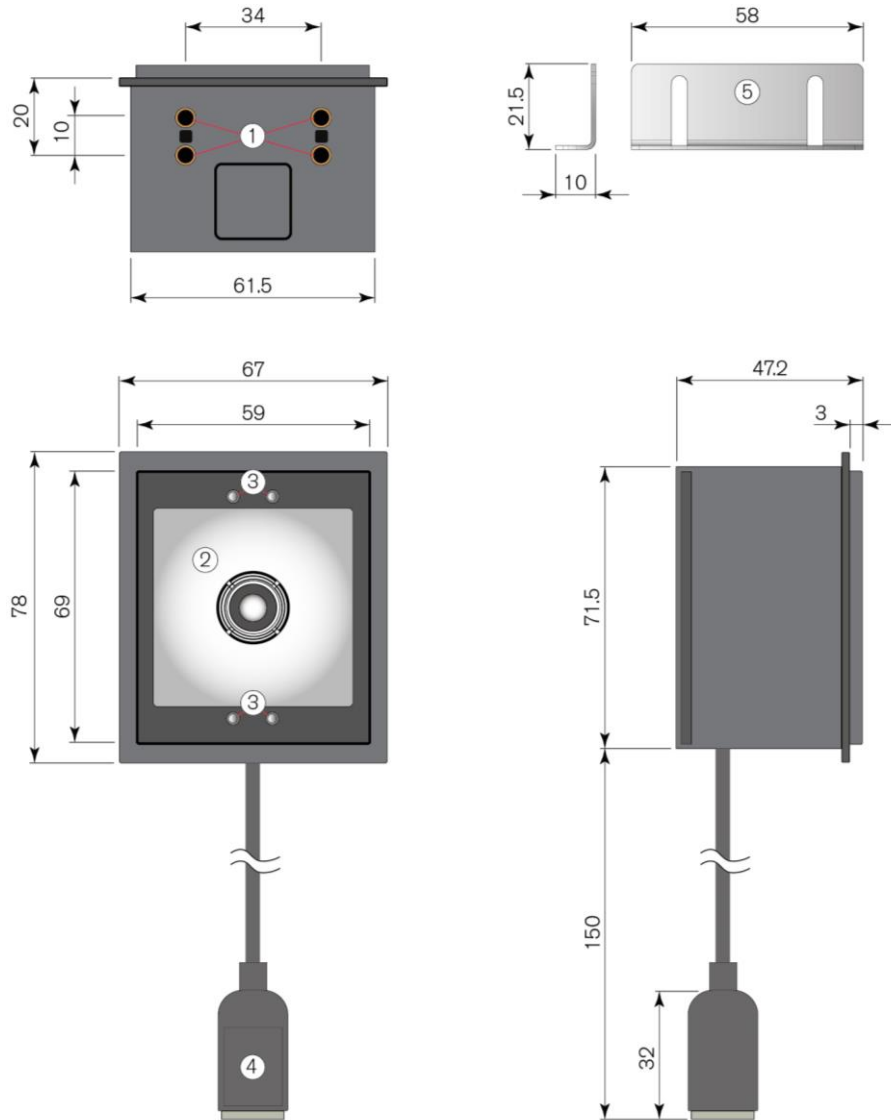


Figure 7.1 – Dimensions of the central terminal

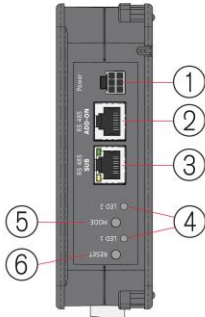
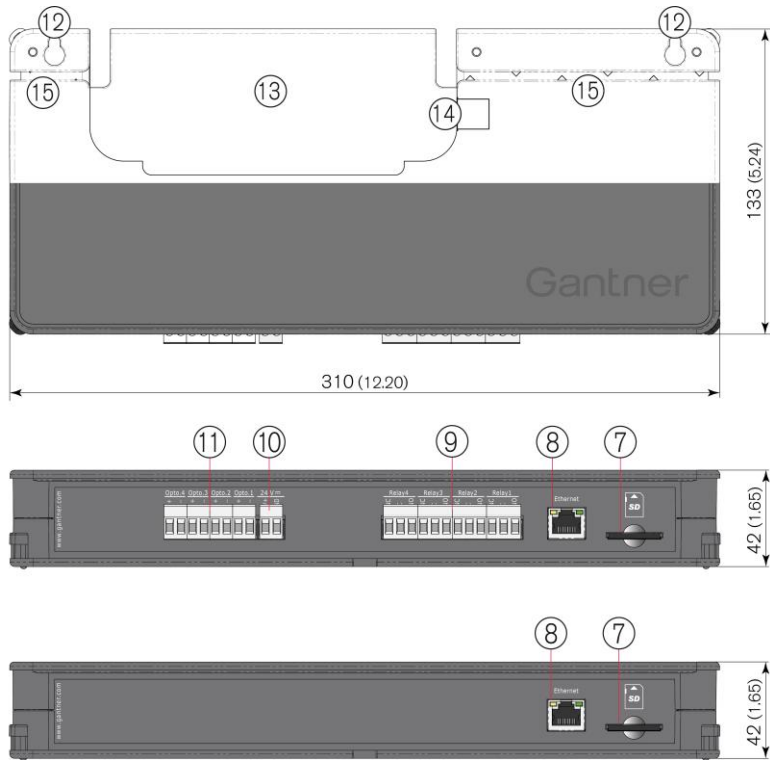
7.4 Barcode reader dimensions



- 1 Screw holes for mounting bracket (M3, depth = 3.5 mm)
- 2 Barcode scan window
- 3 IR sensor
- 4 Data port
- 5 SLH Barcode Reader Mounting Bracket

Figure 7.2 – Dimensions and features of the SLH Barcode Reader and Mounting Bracket (dimensions in mm)

7.5 Controller dimensions



GAT NET.Controller M 7020

GAT NET.Controller M 7020 Light

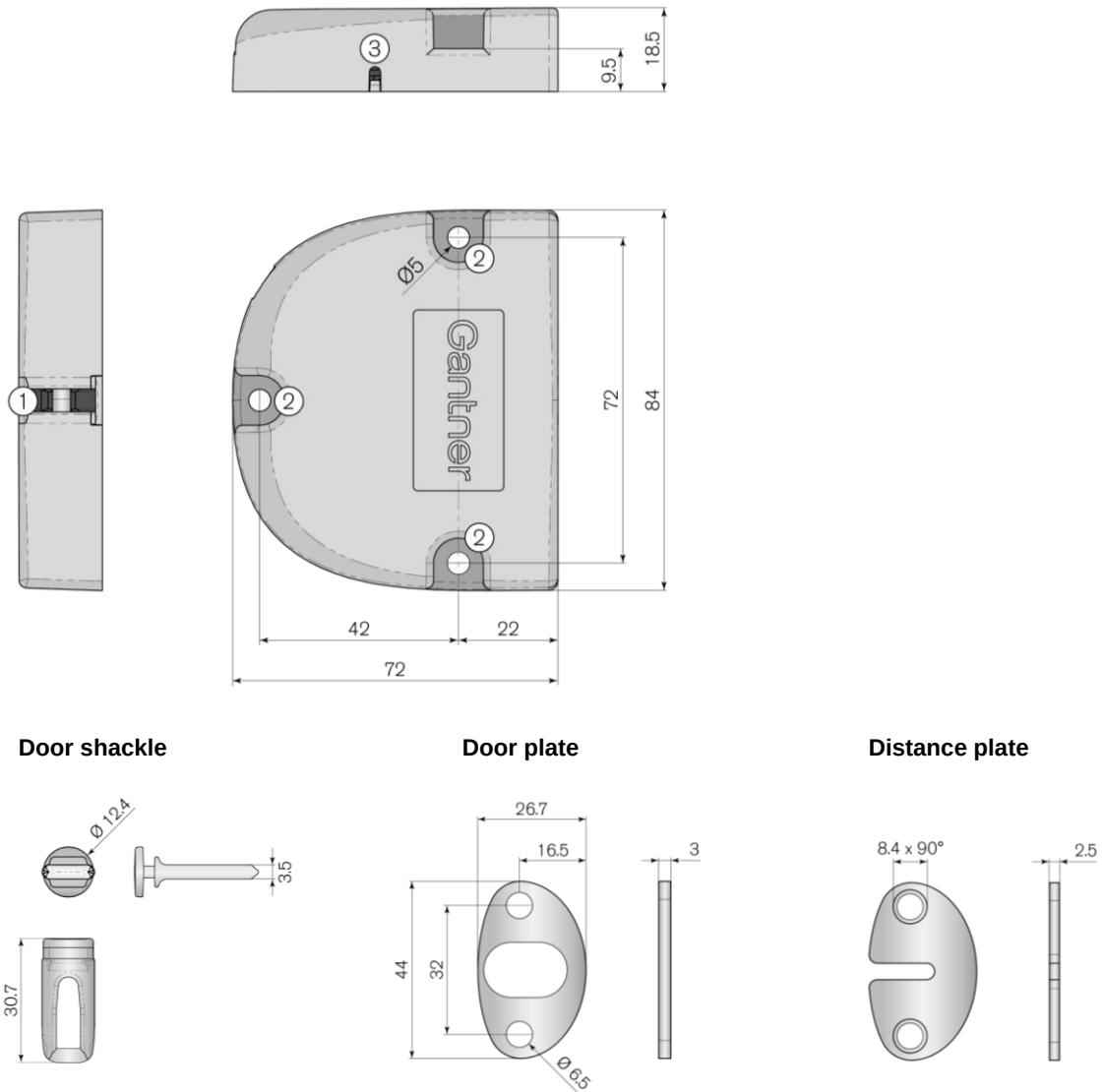
Dimensions in mm (inches in brackets)

- | | | |
|---|---------------------------------|----------------------------------|
| 1 Voltage supply input | 6 RESET button | 11 Optocoupler inputs |
| 2 Serial interface RS-485 for sub-devices | 7 SD card slot | 12 Mounting holes |
| 3 Serial interface RS-485 for extensions | 8 Ethernet connection (network) | 13 Power supply compartment |
| 4 Status LEDs | 9 Relay outputs | 14 USB connector (optional WLAN) |
| 5 MODE button | 10 Voltage output DC 24 V | 15 Cable holder |

Figure 7.3 – Controller dimensions (example GAT NET.Controller M 7020)

7.6 GAT SMART.Lock 7001 dimensions

GAT SMART.Lock 70x1



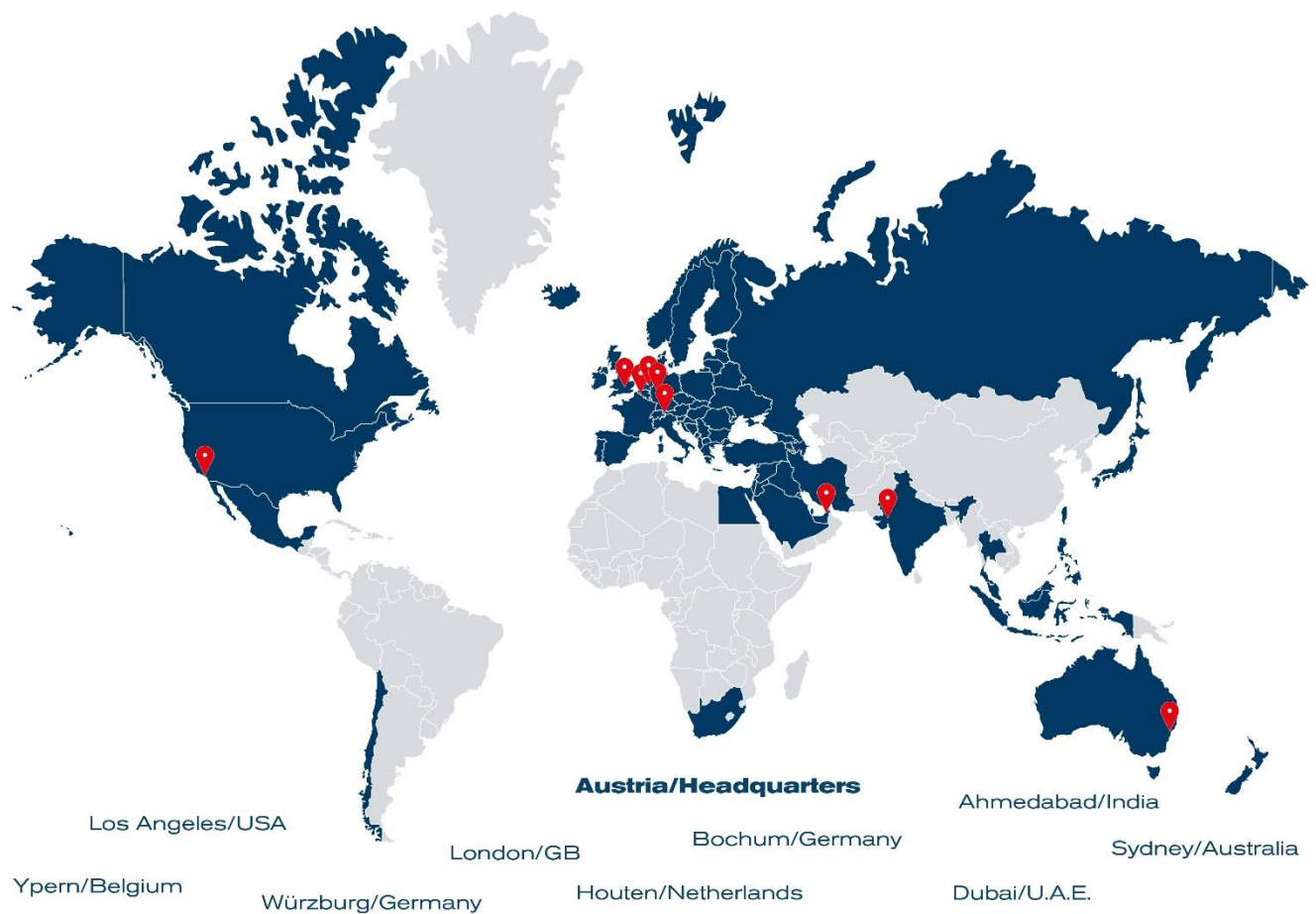
Dimensions in mm

- 1 Opening for door shackle
- 2 Mounting holes
- 3 Mounting lock/emergency opening

Figure 7.4 – Dimensions of the GAT SMART.Lock 7001 and door shackle set

Note:

This manual is valid as of 12th January 2023. It is subject to change.
Amendments and changes can be made without prior notice at any time.



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