

# **GAT ECO.Side Lock**

**Battery-Powered Electronic Locker Lock** 





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#### Contact address of manufacturer:

GANTNER Electronic GmbH 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, 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.



# **ACAUTION**

### 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:



# 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

<b>▲</b> CAUTION	Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.
NOTICE	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.
A	Caution: Electrical Shock This symbol indicates warnings related to electrical hazards (danger due to high voltage).
8	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.



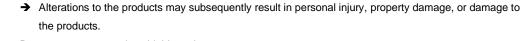
# ⚠ Important Safety Information ⚠



- 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.).





- 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,



- 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 the 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 ECO.Side Lock was developed and fabricated 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 complete text of the CE Declaration of Conformity is available on the following internet link: <a href="http://www.gantner.com/en/downloads-gat-eco-sidelock7xxx">http://www.gantner.com/en/downloads-gat-eco-sidelock7xxx</a> 90lweb4f22



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 Information Statement:**

#### FCC ID: NC4-GEA1180067A

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.

### INDUSTRY CANADA INFORMATION (IC ID: 11873A-1180067A)

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference: and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le onctionnement.

#### **ICES Statement (Canada)**

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la class B est conforme à la norme NMB-003 du Canada.



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### 1 INTRODUCTION

#### 1.1 About this Manual

This manual contains the information necessary for the installation of the GAT ECO.Side Lock electronic locker locks. The GAT ECO.Side Lock is available in various variants (see chapter "2.3 GAT ECO.Side Lock Variants" for more information), and the terms "GAT ECO.Side Lock" and "lock" are used interchangeably throughout the manual to represent all variants. If information only applies to a specific lock, the respective product name is used.



Information on the configuration and operation of the GAT ECO.Side Lock is available in separate manuals:

- GANTNER Battery Locker Locks Function Manual: For all battery locker locks without OSS or CardNET functionality.
- GANTNER Battery Locker Locks OSS Function Manual: For all battery locker locks with OSS functionality.
- GANTNER Battery Locker Locks CardNET Function Manual: For all battery locker locks with CardNET functionality.

# 1.2 Chapter Overview

Available in chapter 2 "GENERAL INFORMATION" are a functional description of the GAT ECO.Side Lock, information on the different lock variants, and information on the bolt sets and door labels.

Chapter 3 "INSTALLATION" describes how to install the GAT ECO.Side Lock into the locker. Here you will find the installation procedure for the locks including all the important measurements and tips for installation.

Chapter 4 "COMMISSIONING" describes how to put the GAT ECO. Side Lock into operation and includes information on the battery used to power the lock and the USB connection used for PC connection and configuration.

Contained in chapter "5 MAINTENANCE" are the instructions for performing functional testing and maintenance of the GAT ECO. Side Lock to ensure that the correct operation is maintained.

Chapter 6 "TECHNICAL DATA" contains all the relevant technical information of the GAT ECO.Side Lock.

# 1.3 Target Group

This manual contains information relevant for the different stages in the operating life of the lock. Information regarding the installation, commissioning, and service/maintenance is separated into corresponding chapters. When a chapter is intended for a specific audience, this is clarified at the beginning of the chapter.

Information for the following target groups is available in this manual:

- installation technicians / locker manufacturers (installation, commissioning),
- service technicians (service and maintenance).



Where not explicitly stated, the information in this manual is intended for all target groups in general.

**CAUTION!** Injury and property/equipment damage. The tasks described in each chapter must only be performed by the specified target group. Unqualified personnel who perform the described tasks risk personal injury or damaging 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 of 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.



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 better understand the information in this 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 that must be followed.
  - This symbol represents the result after completing the instruction.

# 1.5 Terminology

Several key terms that are used often in this manual are defined below.

# Computer / PC

These terms refer to all desktop and laptop computers used to configure and maintain the locks.

#### **Data carrier**

An identification medium with electronic memory and an ID number that is used by the employees and visitors of a facility for identification. Data carriers are available in a variety of different forms (e.g., chip cards, wristbands, key tags), and to suit different RFID technologies (LEGIC, MIFARE®, ISO 15693).



#### System data carrier

Several different types of system data carriers are used for programming, service, and maintenance tasks. These data carriers have special functions and as they are essential for operation and have security-related features, they must be kept in a secure place protected against unauthorized use. Most of the system data carriers are included in the battery lock configuration set, however, some must be ordered separately as required.

#### FID (Company ID) and Site Key

LEGIC systems use the FID number and in MIFARE® systems the site key is used, which is a combination of the FID and the read and write keys. The FID and site key are unique for every facility. These numbers are encoded in every data carrier and device used in the facility thereby ensuring that data carriers from one installation cannot be used in other installations.

#### **GAT ECO Lock Configurator**

A GANTNER developed PC software that is used to configure the GANTNER battery-powered locker locks.

#### Lock

General term for all lock variants.

#### Locker

The term "locker" is used to describe all possible locker applications that can be fitted with a GANTNER electronic lock. Typical applications include a changing room locker, a deposit box, or a private box.

#### **RFID** (Radio-Frequency Identification)

Identification over a short distance using radio frequency. An RFID data carrier is used to identify users in GANTNER systems.

#### **Wireless**

Identification via a wireless interface in the range 2.402 to 2.48 GHz, over which identification and locker operation from a distance is possible, e.g., via a smartphone app. An additional feature is the monitoring of the lock status using an access point and the Relaxx locker management software.

#### User / Guest / Visitor

These general terms refer to the people in a facility who use the locker system with GANTNER locker locks, data carriers, and other GANTNER devices.

# Left locker door / right locker door

Door opening direction according to DIN 107, i.e., whether the hinges or axis of rotation of the door are on the left or right when looking at the locker door. For more information see "3.8 Definition of the Door Direction (Right of Left Door)".

## 1.6 Contact & Inquiries

If you have any questions concerning the GAT ECO.Side Lock, please contact your local sales partner or directly with one of the GANTNER branch offices. The contact details of the branch offices are provided on the cover of this manual.

GAT ECO.Side Lock Introduction





### 2 GENERAL INFORMATION

### 2.1 Intended Use

The GAT ECO.Side Lock may only be used for the electronic locking of lockers in facilities such as leisure facilities, universities, companies, depots, and other individual business applications. The GAT ECO.Side Lock is locked and unlocked using contactless RFID (Radio Frequency Identification) data carriers.

# 2.2 Functional Description

The GAT ECO.Side Lock is suitable for any type of locker material (e.g., sheet metal, wood, HPL, solid plastic, glass) and can be used for left- and right-hinged doors alike. Due to the mechanical compatibility with the GAT NET.Lock 7000 series, a quick and simple installation of existing locker rooms using the GAT ECO.Side Lock is possible.

The GAT ECO.Side Lock is installed on the inner side of the locker body. A bolt set is mounted on the inside of the locker door. The bolt set holds the door shackle that inserts into the GAT ECO.Side Lock and locks the door. The GAT ECO.Side Lock is suitable for most types of locker material, e.g., sheet metal, wood, HPL, and solid plastic. For locker doors made from metal, use the GAT NET.Lock BoltSet 7200 and for glass locker doors, the GAT NET.Lock BoltSet 7300 is available. The bolt sets include a passive booster that amplify the RFID reading field.

The GAT ECO.Side Lock is powered by one 3.6 V AA lithium battery, which provides an operating life of up to 10 years\* (at room temperature) before requiring replacement. For configuration, the lock connects to a computer via USB and can then be configured using GANTNER's "GAT ECO Lock Configurator" configuration software. Configuration via NFC with a mobile device and the GANTNER "MoLA" app is also possible. The lock can operate in one of five operating modes thereby providing flexibility for different locking requirements within a facility.

#### Using a locker

To use a locker, the user closes the door of their locker and while holding the door shut, holds their data carrier next to the RFID reading field, which is indicated by an LED on the locker door. The GAT ECO.Side Lock reads the data carrier information and determines whether the user is allowed to use the locker. If the user is authorized, the GAT ECO.Side Lock locks the locker door.

To unlock a previously locked locker, the user presses the locker door while holding their data carrier next to the RFID reading field. The GAT ECO.Side Lock checks that the data carrier has valid authorization before automatically unlocking the locker door.

\* Different operating modes or configurations can reduce the battery lifetime.



### 2.3 GAT ECO. Side Lock Variants

Multiple variants of the GAT ECO. Side Lock are available to suit different requirements, e.g., identification options. The following table provides an overview of the variants and their different functions.

Variant	RFID <sup>1)</sup>	Wireless 2)
GAT ECO.Side Lock 7000 BA	LEGIC advant reader	-
GAT ECO.Side Lock 7000 NW BA	- LEGIC prime - LEGIC advant	X
GAT ECO.Side Lock 7000 NW BA OSS 3)	- LEGIC combi data carrier (CTC, MV, MP, MM)	Х
GAT ECO.Side Lock 7000 NW BA CardNET 4)	- MIFARE® Classic (1k & 4k) - DESFire EV1®, EV2®, EV3® - MIFARE Ultralight® - NFC (HCE) - HID iClass CSN (UID) 13.56 MHz - ISO 15693	X
GAT ECO.Side Lock 7010 F/ISO	MIFARE / ISO 15693 reader	-
GAT ECO.Side Lock 7010 NW F/ISO	- MIFARE® Classic (1k and 4k) - DESFire EV1®, EV2®, EV3® - MIFARE Ultralight® - NFC (HCE) - HID iClass CSN (UID) 13.56 MHz - LEGIC advant (UID) - ISO 15693	×

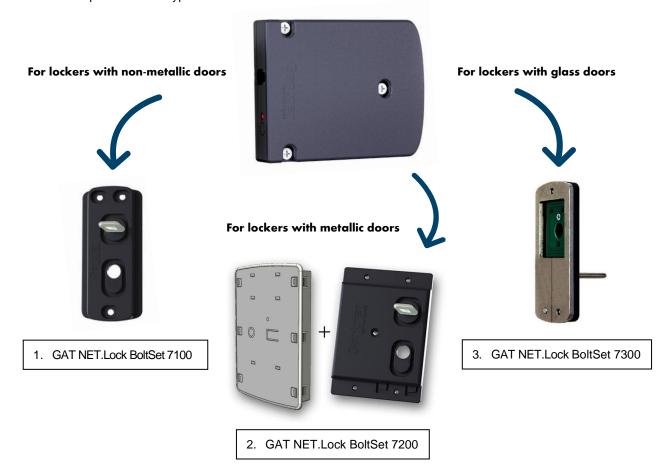
- 1) Identification via radio frequency (13.56 MHz) over a short distance of up to a few centimeters (RFID = Radio-Frequency Identification).
- 2) Identification via wireless technology (2.402 to 2.480 GHz) over long distances of up to several meters. This option can be used, e.g., for identification at the lock using a smartphone with a specific app. An additional feature is the monitoring of the lock status using an access point and the Relaxx locker management software.
- 3) Available with OSS Standard Offline function. See the respective documentation for more information.
- 4) Available with CardNET function. See the respective documentation for more information.

Table 2.1 - GAT ECO. Side Lock variants



### 2.4 Bolt Sets

GANTNER provides three types of bolt set to suit different locker materials.



- 1. GAT NET.Lock BoltSet 7100 (Part No. 369535)
  - Bolt set with door shackle and booster. Used for non-metallic doors. The bolt set is mounted on the inside of the locker door. For installation instructions, see chapter "3.12 Installation in Lockers with Non-Metallic Doors (Except Glass)".
- 2. GAT NET.Lock BoltSet 7200 (Part No. 532123)
  - Bolt set with door shackle and booster. Used for metallic doors. The bolt set is installed into locker door. The label carrier is included in the set. For installation instructions, see chapter "3.13 Installation in Lockers with Metallic Doors".
- 3. GAT NET.Lock BoltSet 7300 (Part No. 774232)
  - Bolt set with door shackle, booster, and metal support. Used for glass doors. The bolt set with metal support attached are glued on the inner side of the glass door. Adhesive is not included with the set. For installation instructions, see chapter "3.14 Installation in Lockers with Glass Doors".



### 2.5 Door Labels

After installing the lock, a label can be attached to the front of the locker door to display the locker number or provide instructions for use. GANTNER offers labels in a variety of shapes and sizes for the GAT ECO.Side Lock, e.g., the GAT NET.Lock Label G18:



### **GAT NET.Lock Label G18 xxx**

Self-adhesive locker door labels in GANTNER design. For metallic doors, the label is stuck onto the label carrier. For non-metallic doors, the label is stuck directly onto the door. The labels are available for right and left doors and with or without printed locker numbers:

- GAT NET.Lock Label G18 Right (Part No. 1101743). For right-hinged doors, without numbering.
- GAT NET.Lock Label G18 NUM Right (Part No. 1101745). For right-hinged doors, with numbering.
- GAT NET.Lock Label G18 Left (Part No. 1101742). For left-hinged doors, without numbering.
- GAT NET.Lock Label G18 NUM Left (Part No. 1101744). For left-hinged doors, with numbering.

Other label shapes and sizes are available and GANTNER can also design and print customer-specific labels.

Contact your GANTNER representative for more information.



### 3 INSTALLATION

**NOTE!** These installation instructions describe how to install the GANTNER locker lock. Please read this section carefully prior to working on the lockers or installing the locks.

# NOTICE

### Risk of damage or failure to the lock

- Read the information in this section carefully before installing the lock.
- Carefully observe the installation diagrams.
- Use the correct tools to install the lock.

### 3.1 Target Group

This chapter provides information for technicians responsible for installing the locker lock. Experience in mechanical work and basic electrical knowledge is required. Previous knowledge of GANTNER locks is not required.

### 3.2 Test Installation

As GANTNER locks are suitable for a wide range of installation applications, always perform a test installation including functional testing of the lock in a sample locker from the facility before starting with the mass production of lockers. During testing, ensure that:

- the door shackle slides centrally into the opening of the GAT ECO. Side Lock.
- the door locks without any problems.
- the door opens without resistance (ensure retaining hardware such as springs are correctly calibrated).

Also test the lock using a data carrier, ideally of the same type to be used with the locker system, to ensure the data carrier functions as required. Once the test installation is successfully completed, the remaining locks can be installed in the same way. An installation checklist is available from GANTNER to assist with the test installation process.

# 3.3 Replacement After Break-In

If a break-in (forced opening) is attempted or occurs at a locker, the entire GAT ECO.Side Lock must be replaced with a new one. The bolt set and the door shackle must also be replaced.

# 3.4 Transportation Guidelines

- The electronics of the lock are activated when the locker door is pressed shut. For factory-produced lockers
  that use the GAT ECO.Side Lock, it is important to ensure the bolt set does not activate the lock's electronics
  during transportation or any time prior to delivery. Activation of the lock electronics during transportation can
  decrease the battery lifetime.
- 2. If the locker body is not secure and the locker door is allowed to slide during transport, the bolt should not be installed before delivery as this may cause shearing of the bolt or damage to the lock.



### 3.5 Door Status Contact

The GAT ECO.Side Lock has a feedback contact (2 in Figure 3.1) that is activated by the door contact (1 in Figure 3.1) when the locker door is closed. It is important that this contact remains clean and undamaged to ensure the correct functionality of the lock.

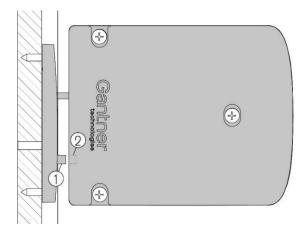


Figure 3.1 - Door status contact

# 3.6 Bolt Gauge

To assist installation in non-metallic doors, the following bolt gauges can be used:

- GAT NET.Lock Tool 7000 (Part No. 533831)
- GAT NET.Lock Tool 7020 (Part No. 1101800)

The gauge allows you to easily mark the drill hole positions onto the door. The instructions for using the bolt gauge are included with the installation instructions for non-metallic doors (see "3.12.1 Installation Instructions for Non-Metallic Doors").

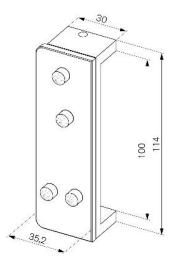


Figure 3.2 – Bolt gauge (dimensions in mm)



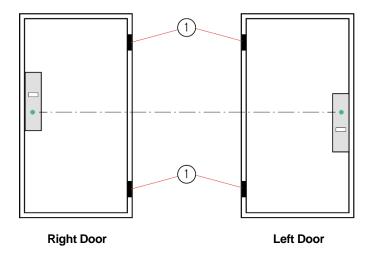
### 3.7 Metallic and Non-Metallic Doors

Because the RFID field of the GAT ECO.Side Lock is distorted or blocked by metal, e.g., metallic locker doors, a cutout is made in metallic locker doors into which the GAT NET.Lock Bolt Set 7200 and label carrier are installed. A specific cutout for non-metallic doors is not necessary, only a drill hole for the status LED is required.

As the reading range of the GAT ECO. Side Lock is limited, the door of non-metallic lockers must not be too thick. The maximum door thickness of non-metallic doors depends on the RFID technology and the type of data carriers used.

# 3.8 Definition of the Door Direction (Right of Left Door)

For installation, it is important to determine whether the door is hinged to the left or the right. This is defined as follows:



1. Door hinge

Figure 3.3 – Locker door hinge definition (left/right)

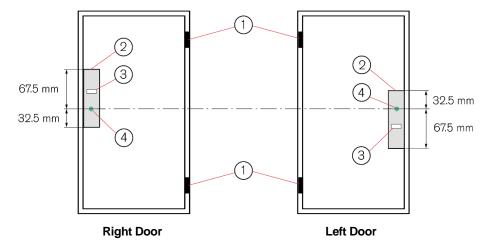
In the following pages the installation process for right-hinged doors is described. The installation process for left locker doors is in principle the same as for right locker doors, only with reversed lock and door orientation.

**NOTE!** If spring hinges are used in the locker door, ensure that the spring strength is calibrated to allow correct operation of the lock. For example, springs that are too strong can keep the bolt set permanently held in thereby activating the lock's electronics and draining the battery.



### 3.9 LED Position

If right- and left-hinged locker doors are being used together in a facility, please note the correct LED position to ensure a uniform appearance. The GAT ECO.Side Lock is mounted upside-down on left doors in comparison to right doors.



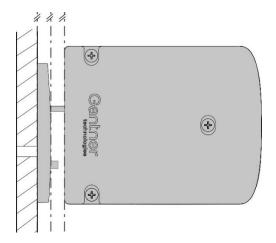
- 1. Door hinge
- 2. GAT ECO.Side Lock
- 3. Opening for door shackle
- 4. Status LED

Figure 3.4 - LED position of the GAT ECO. Side Lock for right and left-hinged doors

# 3.10 Installation Requirements for the GAT ECO.Side Lock

During installation, please pay particular attention to the following requirements:

- 1. When the door is pressed shut, ensure there is no gap between the bolt set (2) and the front of the GAT ECO.Side Lock. Ideally the bolt set should touch the front of the lock.
- 2. The locker door, the bolt set, and the front side of the GAT ECO.Side Lock must be perpendicular and parallel to each other. If not, the door contact in the GAT ECO.Side Lock can potentially not function correctly.





# 3.11 Measurement Diagrams for Installation



All measurements in the following installation diagrams are in millimeters. Inches are provided in parenthesis for reference only.

#### 3.11.1 **Door Width**

The minimum door width allowed (measured from the door shackle to the hinge) is 230 mm (9.05´´). If the door is narrower, the door shackle will hit the locker when the door is being closed.

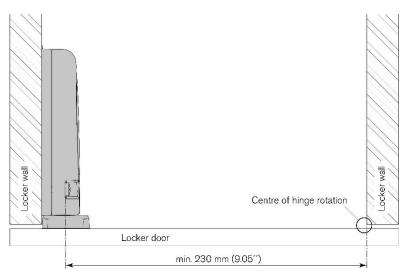


Figure 3.5 - Minimum door width

### 3.11.2 Dimensions of the GAT ECO.Side Lock and GAT NET.Lock Bolt Sets

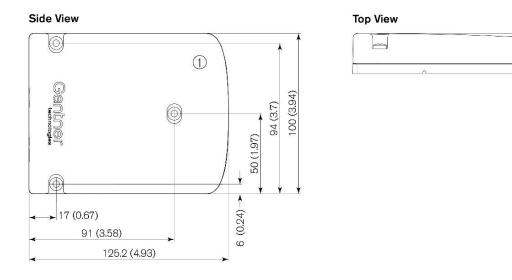


Figure 3.6 - Dimensions of the GAT ECO. Side Lock

25 (0.98)



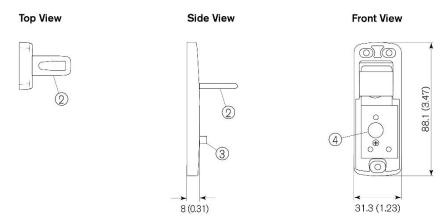


Figure 3.7 - Dimensions of the GAT NET.Lock BoltSet 7100

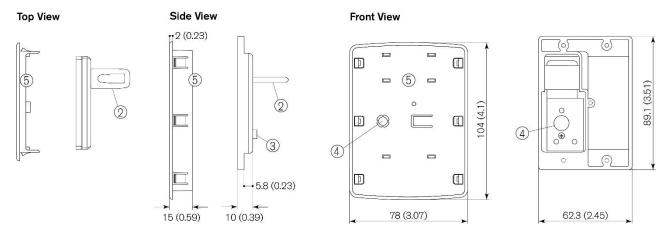


Figure 3.8 - Dimensions of the GAT NET.Lock BoltSet 7200

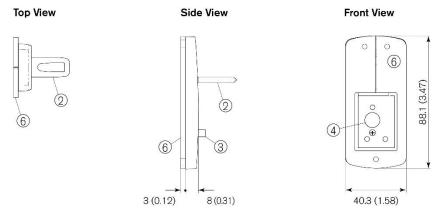


Figure 3.9 - Dimensions of the GAT NET.Lock BoltSet 7300

- 1. GAT ECO.Side Lock
- 2. Door shackle
- 3. Door contact

- 4. Status LED
- 5. Label carrier (front cover on door outer side)
- 6. Metal support for glass door installation

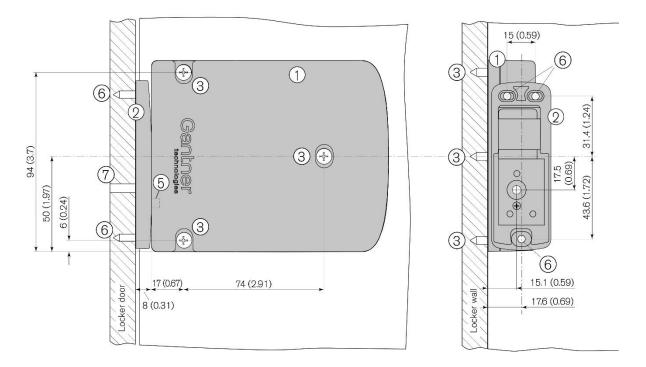


# 3.12 Installation in Lockers with Non-Metallic Doors (Except Glass)

For lockers with non-metallic doors, the GAT ECO.Side Lock is mounted on the left or right inner locker wall depending on whether it is a right or left-hinged locker door. The GAT NET.Lock Bolt Set 7100 is mounted on the inside of the locker door. A drill hole is required in the locker door for the status LED. See the diagram below and the following installation instructions.



For glass door installation instructions see "3.14. Installation in Lockers with Glass Doors".



- 1. GAT ECO.Side Lock
- 2. GAT NET.Lock Bolt Set 7100
- 3. 3 x mounting holes for the GAT ECO. Side Lock (the use of threaded sleeves is recommended)
- 5. Door contact
- 6. 3 x mounting screws for the GAT NET.Lock BoltSet 7100
- 7. Hole for LED

Figure 3.10 - Installation in a locker with non-metallic door (right-hinged)



#### 3.12.1 Installation Instructions for Non-Metallic Doors

Complete the following steps to install the GAT ECO. Side Lock into lockers with non-metallic doors.

▶ Drill 3 holes (3 in Figure 3.10) for the GAT ECO.Side Lock into the locker wall inner side.

**NOTE!** It is recommended to use threaded sleeves with the mounting holes. Position the 3 holes according to the measurements in Figure 3.10.

- ► Insert the battery into the GAT ECO.Side Lock (see section "4.3.2. Inserting the Battery").
- Mount the GAT ECO.Side Lock with 3 screws (3) onto the locker wall inner side.

**NOTE!** Use the correct screws according to the type of locker material, max. Ø 4 mm (0.16 in). The maximum allowed tightening torque of the screws is 2 Nm (1.47 lb-ft).

- ► Mark the mounting holes (6) for the GAT NET.Lock BoltSet 7100 and the hole for the LED (7) onto the locker door inner side. This can be done using the installation diagrams on the previous pages or using the bolt gauge (GAT NET.Lock Tool 70x0 see "3.6 Bolt Gauge").
- If using the bolt gauge for marking:
  - ▶ Insert the bolt gauge onto the front of the installed GAT ECO.Side Lock. The bolt gauge can only be inserted in one orientation and snaps onto the lock.
  - Close the door so that the center points on the bolt gauge mark the hole positions onto the locker door inner side.

**NOTE!** For doors made of softer material, moderate pressure is sufficient. For doors made of harder material, press the door with sufficient force so that the drill markings are visible.

- ▶ Remove the bolt gauge from the GAT ECO.Side Lock.
- ▶ Drill the three marked mounting holes (6) to the required depth and diameter according to the screws used.
- ▶ Drill the hole for the LED through the locker door (7). The recommended drill hole diameter is 10 mm (0.4′′) or 8 mm (0.3′′) when using an LED cap see following instructions.
- ▶ Attach the bolt set to the locker door inner side using 3 screws.

**NOTE!** Use the correct screws according to the type of locker material, max. Ø 4 mm (0.16 in). The maximum allowed tightening torque of the screws is 2 Nm (1.47 lb-ft).

► To cover the LED hole, a label (GANTNER design or customer-specific design) can be attached to the front of the locker door. A transparent (matt) window for the LED must be incorporated into the label.

**NOTE!** For customer-specific labels, ensure that a transparent window for the LED is incorporated in the design and that no metallic films or colors are used.

Alternatively, the LED hole can be covered using a transparent LED cap (GAT LED Plug 8mm, Part No. 806325). In this case, the LED hole must be 8 mm in diameter.

- ► Test the installation to confirm that:
  - the locker door closes easily.
  - the door shackle inserts correctly into the GAT ECO.Side Lock. The locker door must spring open without assistance after it is unlocked.
  - when the door is pressed shut, there is no gap between the bolt set and the front of the GAT ECO.Side Lock. Ideally the bolt set should touch the front of the lock.



### 3.13 Installation in Lockers with Metallic Doors

For lockers with metallic doors, the GAT ECO.Side Lock is mounted on the left or right inner locker wall depending on whether it is a right or left-hinged locker door. The door thickness must be between 18 and 26 mm (0.71 in and 1.02 in). Two cutouts must be made in the locker door - one in the inner door sheet and one in the outer door sheet. The two parts of the GAT NET.Lock Bolt Set 7200 are then mounted into the locker door. See the following diagram and installation instructions.

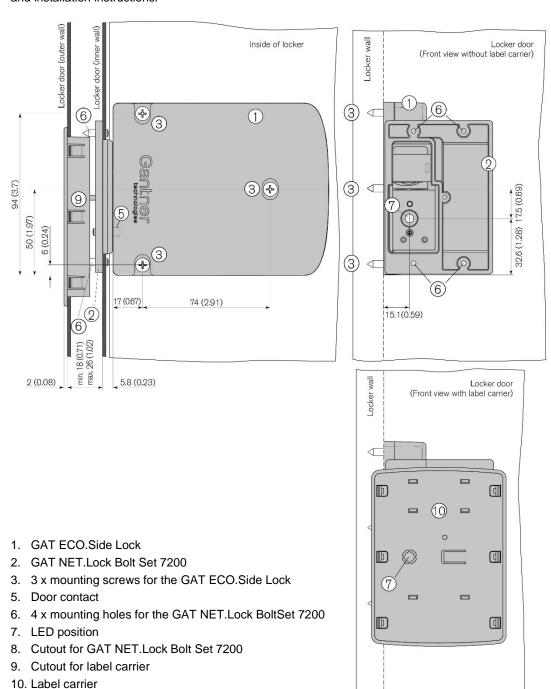


Figure 3.11 - Installation in a locker with metallic door (right-hinged)



#### 3.13.1 Cutouts in the Locker Door

The following cutouts must be made on the inner and outer walls of the locker door in order to mount the GAT NET.Lock BoltSet 7200 and label carrier. The measurements for the cutouts are as follows.

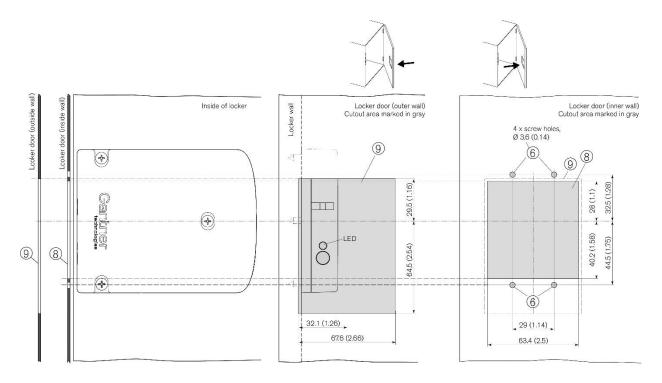


Figure 3.12 - Cutouts for metallic locker doors



#### 3.13.2 Installation Instructions for Metallic Doors

Complete the following steps to install the GAT ECO. Side Lock into lockers with metallic doors.

- ▶ Drill 3 holes (3 in Figure 3.11) for the GAT ECO.Side Lock into the locker wall inner side.
  - NOTE! Position the 3 holes according to the measurements in Figure 3.11.
- ▶ Insert the battery into the GAT ECO.Side Lock (see section "4.3.2. Inserting the Battery").
- ▶ Mount the GAT ECO.Side Lock with 3 screws (3) on the inside locker wall.
  - **NOTE!** Use the correct screws according to the type of locker material, max. Ø 4 mm (0.16 in). The maximum allowed tightening torque of the screws is 2 Nm (1.47 lb-ft).
- ► Cut out a section, 63.4 mm x 68.2 mm (2.5 in x 2.69 in), in the inner wall of the locker door for the GAT NET.Lock Bolt Set 7200 (8 in Figure 3.12).
- ▶ Drill 4 holes (6 in Figure 3.12) in the inner wall of the locker door for mounting the GAT NET.Lock Bolt Set 7200.
- ► Cut out a section, 67.6 mm x 94 mm (2.66 in x 3.7 in), in the outer wall of the locker door for the label carrier (9 in Figure 3.12).
- Mount the bolt set onto the inside wall of the locker door using 4 screws.
  - **NOTE!** Use pan-head metal screws,  $\emptyset$  3.5 mm (0.14 in), screw length depends on locker door thickness. The maximum tightening torque of the screws is 2 Nm (1.47 lb-ft).
- ▶ Push the label carrier onto the outside wall of the locker door. The label carrier will remain in place with the lashes on the label carrier. To protect against manipulation, a screw can be used to fix the bolt set to the label carrier.

**NOTE!** Use a countersunk screw, Ø 2.9 mm (0.11 in). Screw length depends on locker door thickness, e.g., a 15 mm (0.59 in) thick door requires a 19 mm (0.75 in) long screw.

- ► Test the installation to confirm that:
  - the locker door closes easily.
  - the door shackle inserts correctly into the GAT ECO.Side Lock. The locker door must spring open without assistance after it is unlocked.
  - when the door is pressed shut, there is no gap between the bolt set and the front of the GAT ECO.Side Lock. Ideally the bolt set should touch the front of the lock.



A label (7) can be attached to the label carrier on the front of the locker door. The label has a transparent (matt) viewing window for the LED to shine through and can be ordered with a GANTNER design or customer-specific design.

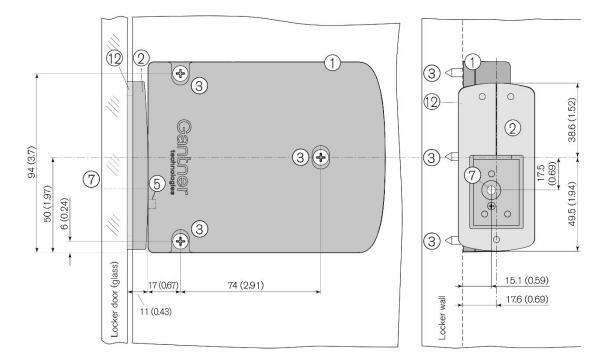
**NOTE!** For customer-specific labels, ensure that a transparent field for the status LED is incorporated in the design and that no metal foil or metal color are used.

Figure 3.13 – Label carrier with front label



### 3.14 Installation in Lockers with Glass Doors

For lockers with glass doors, the GAT ECO.Side Lock is mounted on the left or right inner locker wall depending on whether it is a right or left-hinged locker door. The GAT NET.Lock Bolt Set 7300 (with metal support attached) are attached to the inner side of the locker door using adhesive. Furthermore, a void in the printing on the locker door or door label may be necessary for the status LED to be visible. See the following diagram and installation instructions.



- 1. GAT ECO.Side Lock
- 2. GAT NET.Lock BoltSet 7300
- 3. 3 x mounting screws for the GAT ECO.Side Lock
- 5. Door contact
- 7. LED position
- 12. Metal support for adhering the GAT NET.Lock BoltSet 7300 (the metal support is included with the GAT NET.Lock BoltSet 7300 and is delivered attached to the bolt set).

Figure 3.14 - Installation in a locker with glass door (right-hinged)



#### 3.14.1 Installation Instructions for Glass Doors

Complete the following steps to install the GAT ECO.Side Lock into lockers with glass doors.

- ▶ Drill 3 holes (3 in Figure 3.11) for the GAT ECO.Side Lock into the locker wall inner side.
  - NOTE! Position the 3 holes according to the measurements in Figure 3.14.
- ▶ Insert the battery into the GAT ECO.Side Lock (see section "4.3.2. Inserting the Battery").
- ▶ Mount the GAT ECO.Side Lock with 3 screws (3) on the inside locker wall.
  - **NOTE!** Use the correct screws according to the type of locker material, max. Ø 4 mm (0.16"). The maximum allowed tightening torque of the screws is 2 Nm (1.47 lb-ft).
- ▶ Use glass adhesive to attach the GAT NET.Lock BoltSet 7300 according to the measurements in Figure 3.14 to the inside of the glass door.

#### **NOTE!**

- Before the mass production of lockers begins, testing must be carried out by the locker manufacturer to ensure that the glass adhesive meets the strength requirements.
- Always follow the adhesive manufacturer's instructions.
- The adhesive is not included in the scope of supply.
- ▶ A label can be attached to the front of the locker door. The label has a transparent (matt) viewing window for the LED to shine through and can be ordered with a GANTNER design or customer-specific design.

**NOTE!** For custom labels, ensure that a transparent field for the status LED is incorporated in the design and that no metal foil or metal color are used.

- ► Test the installation to confirm that:
  - the locker door closes easily.
  - the door shackle inserts correctly into the GAT ECO.Side Lock. The locker door must spring open without assistance after it is unlocked.
  - when the door is pressed shut, there is no gap between the bolt set and the front of the GAT ECO.Side Lock. Ideally the bolt set should touch the front of the lock.

GAT ECO.Side Lock Installation





### 4 COMMISSIONING

### 4.1 Target Group

This chapter provides information for technicians responsible for putting the GAT ECO.Side Lock into operation. A base knowledge of electronics is assumed. Previous knowledge of GANTNER locker locks is not required.

# 4.2 Battery Lock Configuration Set

To configure and maintain the battery locks of your locker system and to perform important system functions, GANTNER provides four configuration sets to suit the different GAT ECO.Side Lock variants (see chapter "2.3 GAT ECO.Side Lock Variants").

#### 4.2.1 GAT ECO.Basic Set

The GAT ECO.Basic Set is intended for all GANTNER battery locker locks without CardNET function and OSS Standard Online function. Two GAT ECO.Basic Sets are available to suit the required RFID technology:

- GAT ECO.Basic Set B BA Part No. 958131. Suitable for the GAT ECO.Side Lock 7xxx BA locks.
- GAT ECO.Basic Set FD Part No. 1100550. Suitable for the GAT ECO.Side Lock 7xxx F/ISO locks.

The following items are included in the GAT ECO.Basic Set.

### System data carriers

- MASTER data carrier (3 pieces, red)
- DELETE MASTER data carrier (orange)
- PROGRAM data carrier (black)
- BATTERY data carrier (blue)
- SERVICE data carrier (yellow)
- APP KEY data carrier (purple)

### Additional items included in the Basic Set

- 3 m USB programming cable
- GANTNER lanyard
- Battery compartment key "GL7p Battery Cover Key"
- Battery compartment key "GAT ECO.Lock 7000 Battery Key GEA"
- Emergency power adapter "GAT ECO.EPS 7000" (only for the GAT ECO.Lock 7xxx and GAT ECO.Side Lock 7xxx)

#### Optional data carriers

- OPEN MASTER data carrier

**NOTE!** To maintain the security of the locker system, ensure that the GAT ECO.Basic Set is kept in a secure location protected from unauthorized use.



### 4.2.2 GAT DL 300 Master Key Set

To configure the GANTNER battery locker locks with CardNET function or OSS Standard Online function, GANTNER offers the following configuration sets to suit the required RFID technology:

- GAT DL 300 Master Key Set (ISO 15693) Part No. 253022
- GAT DL 300 Master Key Set (ISO 14443) Part No. 1105331

The following system data carriers, in the form of RFID chip cards, are included in the set.

#### **PROGRAMMING Data Carrier**



# DELETE Data Carrier



**DEMOUNTING Data Carrier** 



### Optional data carriers:

### **COMMUNICATION Data Carrier**



#### **BATTERY Data Carrier**



#### **WINET Data Carrier**



### **DATA SECURE Data Carrier**



**NOTE!** To maintain the security of the locker system, ensure that the GAT DL 300 Master Key Set is kept in a secure location protected from unauthorized use.



# 4.3 Power Supply

### 4.3.1 Battery Information

The GAT ECO.Side Lock is powered by one 3.6 V AA lithium battery (see "6 TECHNICAL DATA"). The lifespan of the battery depends on the number of locking cycles (usage frequency of the lock) and the ambient conditions. The battery must be replaced with a new one when the battery voltage becomes too low. If the battery becomes too weak, the locker can no longer be locked.



A low battery condition is indicated by the LED flashing red 5 times and 5 beeps being emitted during an unlocking or locking attempt.

**NOTE!** Always use the GANTER-approved battery to power the GAT ECO.Side Lock.

- For the EU: Battery 3.6V Tadiran SL-860/S (Part No. 914430).
- For the US: Battery 3.6V Tadiran TL-4903/S.

#### 4.3.2 Inserting the Battery

To put the GAT ECO.Side Lock into operation, insert the battery into the battery compartment of the GAT ECO.Side

**NOTE!** To avoid unnecessary battery usage, insert the battery directly before installing the GAT ECO.Side Lock.

► To access the battery compartment, remove the red battery cover (1 in Figure 4.1) on the underside of the housing by sliding a finger under the semicircular tab of the battery cover and pulling the battery compartment upwards.

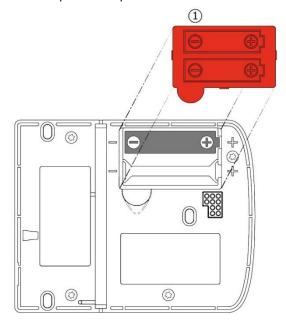
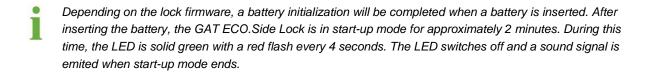


Figure 4.1 - Opening the battery compartment



- ▶ Ensure that the battery polarity is the same as shown in Figure 4.1.
- Press the battery down into the compartment until it locks into place.
- Reinstall the battery cover over the battery compartment and push down until the battery cover is level with the surrounding GAT ECO.Side Lock housing.
  - o When installing the battery in the GAT ECO. Side Lock for the first time, the process is now complete.
  - When the lock has already been used and the battery is being replaced, the lock must be activated using the BATTERY data carrier (see "4.3.3 Replacing the Battery).



### 4.3.3 Replacing the Battery

The battery of the GAT ECO.Side Lock must be replaced when the LED flashes red 5 times and 5 beeps are emitted during a locking attempt. In this state, the lock can no longer be locked until the battery is replaced. Do not operate the GAT ECO.Side Lock while replacing the batteries.

Following battery replacement, the GAT ECO.Side Lock must be returned to its normal operating mode using the BATTERY data carrier that is included in the configuration set (see "4.2 Battery Lock Configuration Set"). In addition, the time must be reset after each battery change (see the "GANTNER Battery Locker Locks Function Manual" for instructions).

- Unscrew the 3 screws that hold the GAT ECO.Side Lock to the locker wall and remove the lock from the locker.
- ▶ Follow the instructions described in section "4.3.2. Inserting the Battery".
- ▶ Reinstall the GAT ECO.Side Lock to the inner side of the locker wall.
- ▶ Press the locker door shut with one hand.
- ► Hold the BATTERY data carrier next to the RFID reading field.
  - The internal counter in the GAT ECO.Side Lock is reset and the lock returns to its normal operating mode.
  - o A confirmation melody is emitted to confirm the action.



Always dispose of used batteries in an environmentally friendly way, e.g., at an electronic waste recycling facility.



### 4.4 USB Connection

To connect to a computer with a Windows® operating system (min. Windows® 7), a Micro-B USB port is provided on the side of the GAT ECO.Side Lock. The USB port location allows configuration to be carried out even while the lock is installed. Always use the correct USB cable, i.e., the 3 m USB cable included in the GAT ECO.Basic Set.

**NOTE!** The maximum cable length between the GAT ECO.Side Lock and a computer is 5 m. The Micro-B USB connector can have a maximum width of 4 mm.

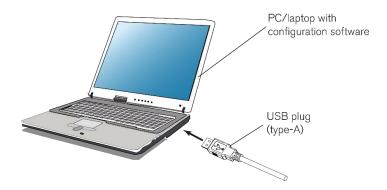
After the USB cable is connected, the SERVICE data carrier is used to put the GAT ECO. Side Lock into configuration mode. However, if the lock is still in the default delivery state, the SERVICE data carrier is not required to activate configuration mode. In this mode, the lock can be configured using the respective configuration software (GAT ECO Lock Configurator or GAT DL Analyzer).



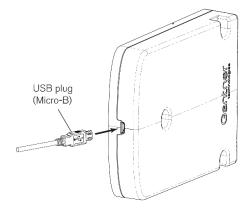
The configuration software is available to download from the GANTNER website (login required). Further information on configuring the lock is available in the "GANTNER Battery Locks Function Manual".

To configure the GAT ECO.Side Lock via PC/laptop:

- ▶ Start the configuration software on the PC/laptop.
- ► Connect the USB cable (type-A end) to a spare USB port on the PC/laptop.



► Connect the Micro-B connector of the USB cable to the USB port on the GAT ECO.Side Lock.





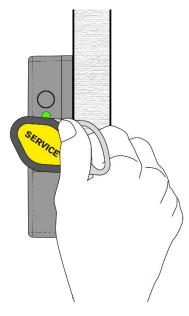
 When the GAT ECO.Side Lock is connected to the computer for the first time, the driver is automatically installed, and the lock recognized.



If the automatic driver installation does not work and you need the driver, it is available to download from the GANTNER partner website (login required) or via the direct link (QR code) on the Basic Set documentation.

#### ► Activate configuration mode:

- For locks without CardNET function or OSS Standard Online function, hold the SERVICE data carrier next to the RFID reading field.
- For locks with CardNET function or OSS Standard Online function, the PROGRAMMING data carrier from the GAT DL 300 Master Key Set or the optional COMMUNICATION data carrier must be used to set the lock into configuration mode.



 The GAT ECO.Side Lock enters into configuration mode. The LED pulses green every 2 seconds to indicate this state.



# **5 MAINTENANCE**

This chapter contains information for the cleaning personnel and service technicians responsible for the cleaning and maintenance of the GANTNER battery locks or lockers.

**ATTENTION!** The instructions described in this chapter may only be carried out by suitably trained personnel. The warnings in this chapter must be observed and followed during functional testing, cleaning, and maintenance.

# 5.1 Cleaning

Regular cleaning of the locker components ensures that the locker system remains in good condition and the correct working order is maintained.

**NOTE!** Do not use cleaning benzene, diluents, or other abrasive detergents. In addition, the components must not be cleaned using a high-pressure or steam cleaner otherwise damage can occur!

Complete the following steps to clean the locker:

- ▶ Wipe off dirt and dust using a soft, lint-free, dry cloth.
- ► For extreme dirt, clean the locker components using a damp cloth. Do not allow any moisture to enter the inner parts of the lock.

# 5.2 Maintenance

The components of the GANTNER battery locks are maintenance-free, i.e., maintenance of the mechanical parts is not required. Should a malfunction be detected during functional testing that cannot be remedied, the corresponding faulty part(s) must be replaced.

# 5.3 Functional Testing

To ensure that the locker locks are functioning correctly, periodically test the functionality of the locker doors and lock components.

#### Frequency

- After every 1000 locking operations, or,
- If the locking function of a locker door is impaired.

#### Instructions

- Press the locker door shut.
  - The door shackle must enter the corresponding opening in the lock centrally without touching the opening. The door must close shut without increased effort. Readjust the door (see instructions) if these conditions are not met.



- The GAT Lock Bolt Set must touch the front of the door lock when the door is pressed shut. Readjust the door (see below) if it does not.
- ▶ While pressing the locker door shut, hold an authorized data carrier near the reading field on the door.
  - o The locker door must lock. If it does not, check that the data carrier authorization is valid.
- ▶ While the locker door is locked, press the door in slightly with the fingers several times.
  - The door must be able to be pressed in slightly, one or two millimeters, and then return by itself. If the
    door gets jammed or is stiff, it must be readjusted (see below).
- ▶ While the locker door is locked, strike the door with the palm of the hand (do not damage the door).
  - The alarm must not be triggered.
- ▶ Hold an authorized data carrier a distance of approximately 1 cm in front of the locker door.
  - The locker door must unlock, and spring open independently. If the door does not spring open by itself, the door must be readjusted (see below). If the data carrier is not read at this distance, the RFID reading field may require recalibration (see the "GANTNER Battery Locker Locks Function Manual" for instructions).

#### Adjusting the locker door and door bolt

If a problem, as described previously in "Instructions", occurs while opening or closing the locker door during functional testing:

- ► Adjust the position of the GAT NET.Lock Bolt Set or the door shackle according to the measurements in chapter "3 INSTALLATION" (depending on the locker material used). If the door shackle is loose and does not remain in the adjusted position or cannot be adjusted sufficiently, the GAT NET.Lock Bolt Set must be replaced.
- ▶ Adjust the position of the locker door according to the measurements in chapter "3 INSTALLATION". If the door cannot be adjusted sufficiently, install it in a different position. If the door is damaged, replace the door with a new door.

## 5.4 Disposal



- Always dispose of the GANTNER battery lock and the associated components at an electronic waste recycling facility in accordance with the local regulations (e.g., European Directive 2002/96/EC).
- Recycle defective or used batteries in accordance with the local regulations (e.g., European Directive 2006/66/EC).
- Observe local regulations for the separate disposal of batteries.
- Recycle packaging in an environmentally friendly manner.



# **6 TECHNICAL DATA**

# 6.1 Power Supply

**Power supply:** 1 x 3.6 V lithium battery, size AA, capacity 2.4 Ah

**GANTNER approved batteries:** EU: Tadiran SL-860/S

US: Tadiran TL-4903/S

Battery lifespan: Up to 10 years\* at +20 °C (68 °F)

\*Depending on usage, configuration, and environmental conditions

# 6.2 Reading Field

Reader type

GAT ECO.Side Lock 7xxx BA: LEGIC advant

GAT ECO.Side Lock 7xxx F/ISO: MIFARE / ISO 15693

See "2.3 GAT ECO.Side Lock Variants" for details on the RFID

technologies.

Note: It is recommended to have customer-specific data carriers approved by

GANTNER before use.

**Reading field frequency:** - RFID: 13.56 MHz

- Wireless interface: 2400 to 2483.5 MHz

**Maximum transmission power:** - RFID: < 500 mW

- Wireless interface: from -20 dBm to 4 dBm

Reading field range: 5 to 35 mm\* (0.2 to 1.38 in)\*

\*Depending on the installation and data carrier

# 6.3 Memory and Time Management

**Data storage:** EEPROM with capacity for 150 bookings, data retained during battery

change

Internal clock: Quartz-controlled, real-time clock

# 6.4 Control and Display Elements

Control element: Door contact in lock

**Display element:** LED (red / green) for status indication



### 6.5 Interfaces

Interface type: USB 2.0

Interface connection: USB type Micro-B

# 6.6 Housing

Material: Plastic (PC), halogen-free, V0

Color: Dark gray

**Weight:** Approx. 400 g (14.1 oz)

**Dimensions:** 125.2 x 100 x 25 mm (4.93 x 3.94 x 0.98 in)

Break-in resistance capability: DIN 4547-2 class C

### 6.7 Environmental Conditions

Permitted ambient temperature: -10 °C to +55 °C (14 °F to 131 °F)

Protection type: IP 52

Protection class:

Environment class (VdS 2110): II (conditions in indoor areas)

Compliances: CE, FCC, IC

NOTE:

This manual is valid as of 29<sup>th</sup> June 2022. It is subject to change. Amendments can be made without prior notice at any time.



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