



# Padlock

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## Manual

29.08.2020

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## 1 General information

The digital padlock is used to lock doors or other entrances or access points. The padlock may only be used for this specific purpose.

- When installing the digital padlock, ensure that there are no sources of interference in the surrounding area.
- You must not strike the thumb-turn during installation.
- The thumb-turn is locked into place with a bayonet mount.
- The padlock is supplied ready for installation.
- Programme padlocks before installing. Use the SmartIntego software to programme them.

Important: The batteries are already installed before delivery.

## 2 General safety instructions

Signal word (ANSI Z535.6)	Possible immediate effects of non-compliance
DANGER	Death or serious injury (likely)
WARNING	Death or serious injury (possible, but unlikely)
CAUTION	Minor injury
IMPORTANT	Property damage or malfunction
NOTE	Low or none



### WARNING

#### Blocked access

Access through a door may stay blocked due to incorrectly fitted and/or incorrectly programmed components. SimonsVoss Technologies GmbH is not liable for the consequences of blocked access such as access to injured or endangered persons, material damage or other damage!

#### Blocked access through manipulation of the product

If you change the product on your own, malfunctions can occur and access through a door can be blocked.

- Modify the product only when needed and only in the manner described in the documentation.



### CAUTION

#### Fire hazard posed by batteries

The batteries used may pose a fire or burn hazard if handled incorrectly.

1. Do not try to charge, open, heat or burn the batteries.
2. Do not short-circuit the batteries.

### IMPORTANT

#### Damage resulting from electrostatic discharge (ESD)

This product contains electronic components that may be damaged by electrostatic discharges.

1. Use ESD-compliant working materials (e.g. Grounding strap).
2. Ground yourself before carrying out any work that could bring you into contact with the electronics. For this purpose, touch earthed metallic surfaces (e.g. door frames, water pipes or heating valves).

### Damage resulting from liquids

This product contains electronic components that may be damaged by liquids of any kind.

- ❑ Keep liquids away from the electronics.

### Damage resulting from aggressive cleaning agents

The surface of this product may be damaged as a result of the use of unsuitable cleaning agents.

- ❑ Only use cleaning agents that are suitable for plastic or metal surfaces.

### Damage as a result of mechanical impact

This product contains electronic components that may be damaged by mechanical impacts of any kind.

1. Avoid touching the electronics.
2. Avoid other mechanical influences on the electronics.

### Damage due to polarity reversal

This product contains electronic components that may be damaged by reverse polarity of the power source.

- ❑ Do not reverse the polarity of the voltage source (batteries or mains adapters).

### Failure of operation due to different discharged batteries

This product uses one or more batteries for power supply. The batteries are discharged at approximately the same rate.

- ❑ Always replace all batteries at the same time.

### Operational malfunction due to radio interference

This product may be affected by electromagnetic or magnetic interference.

- ❑ Do not mount or place the product directly next to devices that could cause electromagnetic or magnetic interference (switching power supplies!).

### Communication interference due to metallic surfaces

This product communicates wirelessly. Metallic surfaces can greatly reduce the range of the product.

- ❑ Do not mount or place the product on or near metallic surfaces.



#### NOTE

##### Intended use

SimonsVoss-products are designed exclusively for opening and closing doors and similar objects.

- ❑ Do not use SimonsVoss products for any other purposes.

**Battery contact malfunction due to grease film**

When touching batteries, leave a thin film of skin grease on the batteries. This film deteriorates the contact between the electronics and the batteries.

1. Do not touch the contacts of the new batteries with your hands.
2. Use clean and grease-free gloves.

Dispose of the batteries as per local and country-specific regulations.

**Function error due to poor battery contact**

If the contact surface to the battery is too small, then the battery connection may not create a stable connection to the battery.

- Only use batteries that are approved by SimonsVoss.

**Different times for G2 locks**

The internal time unit of the G2 locks has a technical tolerance of up to  $\pm 15$  minutes per year.

**Qualifications required**

The installation and commissioning requires specialized knowledge.

- Only trained personnel may install and commission the product.

Modifications or further technical developments cannot be excluded and may be implemented without notice.

The German language version is the original instruction manual. Other languages (drafting in the contract language) are translations of the original instructions.

Read and follow all installation, installation, and commissioning instructions. Pass these instructions and any maintenance instructions to the user.

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### 3 Product specific safety notices

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#### IMPORTANT

##### Damage caused by moisture in outdoor use

Moisture can damage the electronics.

1. If you want to use the locking cylinder for outdoor applications or in high humidity (bathrooms or washrooms), use the WP version.
  2. Carefully insert the locking cylinder to avoid damaging the O-rings.
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#### NOTE

##### Length of locking system password

For security reasons, the locking system password must consist of at least 8 characters. The code length for digital closing cylinders (*and for System 3060/3061 and MobileKey*) corresponds to  $2^{168}$  Bit.

Battery changes may only be carried out by trained personnel and only with the battery key provided (Z4.KEY)!

##### Programming with obsolete LSM version

New components can only be programmed with the current version of LSM.

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## 4 Operating the SL version

### Opening

- Active: Activate the transponder within the thumb-turn's communication range or
- (Passive) SC: Hold the smart card or smart tag in front of the reader thumb-turn.
- You can open the padlock by turning the thumb-turn about 30° in a clockwise direction until it will go no further and the shackle opens.

### Locking

- Close shackle; the shackle always locks into place automatically.
- Always check that it has locked properly.



## 5 Operating the ML version

### Opening

- Active: Activate the transponder within the thumb-turn's communication range or
- (Passive) SC: Hold the smart card or smart tag in front of the reader thumb-turn.
- You can open the padlock by turning the thumb-turn about 30° in a clockwise direction until it will go no further and the shackle opens.

### Locking

- Close shackle.
- Active: Activate the transponder within the thumb-turn's communication range or
- (Passive) SC: Hold the smart card in front of the reader thumb-turn.
- You can open the padlock by turning the thumb-turn about 30° in an anti-clockwise direction until it will go no further.
- Always check that it has locked properly.

## 6 Audible signals

### Active version

- 2 short audible signals before engaging and a short signal after disengaging indicate normal operation.
- Battery Warning Level 1: 8 short audible signals before engaging. Batteries will soon be empty. Replace batteries in the padlock.
- Battery Warning Level 2: 8 short audible signals for 30 seconds with a one-second break between each signal. Indicates emergency battery warning: Batteries are almost completely empty. Replace batteries in the padlock immediately.
- 8 short audible signals after disengaging indicate that the transponder battery is empty. Have transponder battery replaced

### (Passive) SC version

- 2 short audible signals + LED flashes blue twice briefly before engaging and a short audible signal after disengaging: indicates normal activation.
- Battery Warning Level 1: 8 short audible signals + LED flashing red briefly 8x before engaging. Batteries will soon be empty. Replace batteries in the padlock.
- Battery Warning Level 2: 8 short audible signals for 30 seconds + LED flashes red briefly twice with a one-second break between each signal. Indicates emergency battery warning: Batteries are almost completely empty. Replace batteries in the padlock immediately.
- 8 short audible signals after disengaging indicate that the transponder battery is empty. Have transponder battery replaced.

After Battery Warning Level 2 is emitted for the first time, it is still possible

- Active padlock: about 50 opening transactions are carried out.
- (Passive) padlock: about 200 opening transactions are carried out.

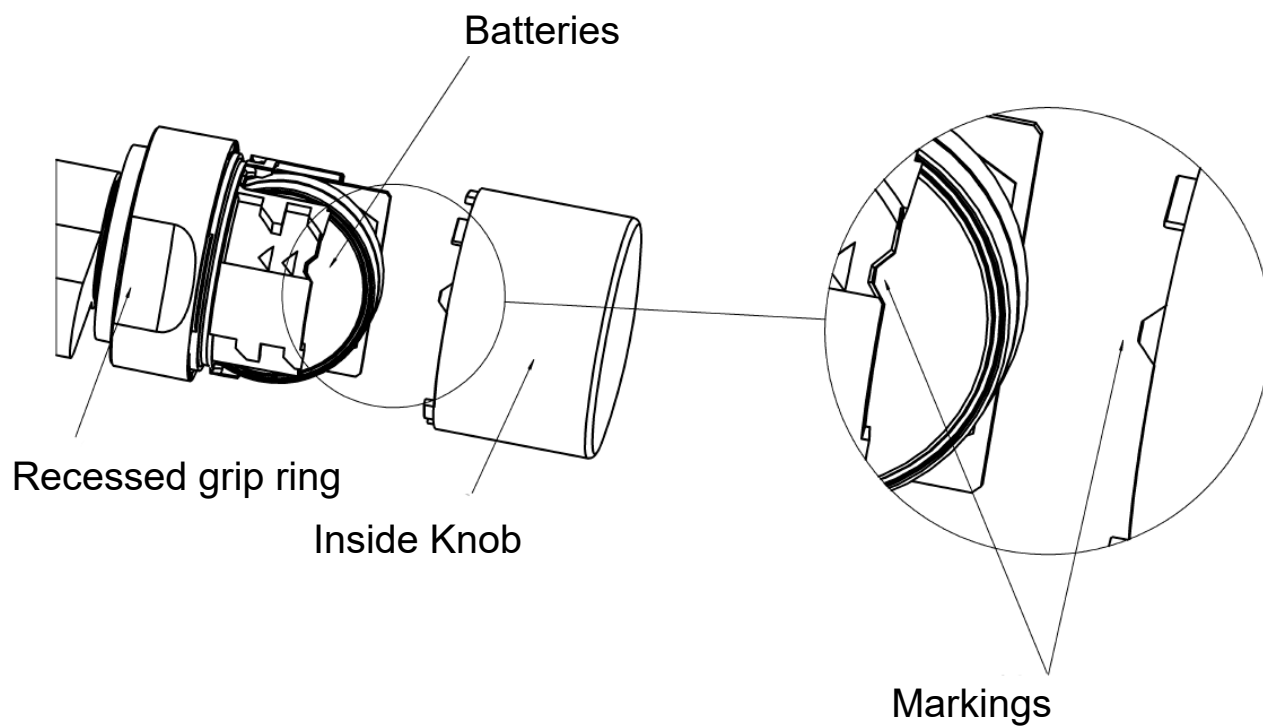
After reaching this number of opening transactions or after about 4 weeks (active) / about 2 weeks (passive/SC), the padlock automatically switches to

- G1: emergency battery storage mode
- G2: freeze mode

Once this warning level is reached, only the locking system administrator is able to gain access. User transponders are no longer accepted (consult 'Battery warnings' in the locking cylinder manual for more detailed information).

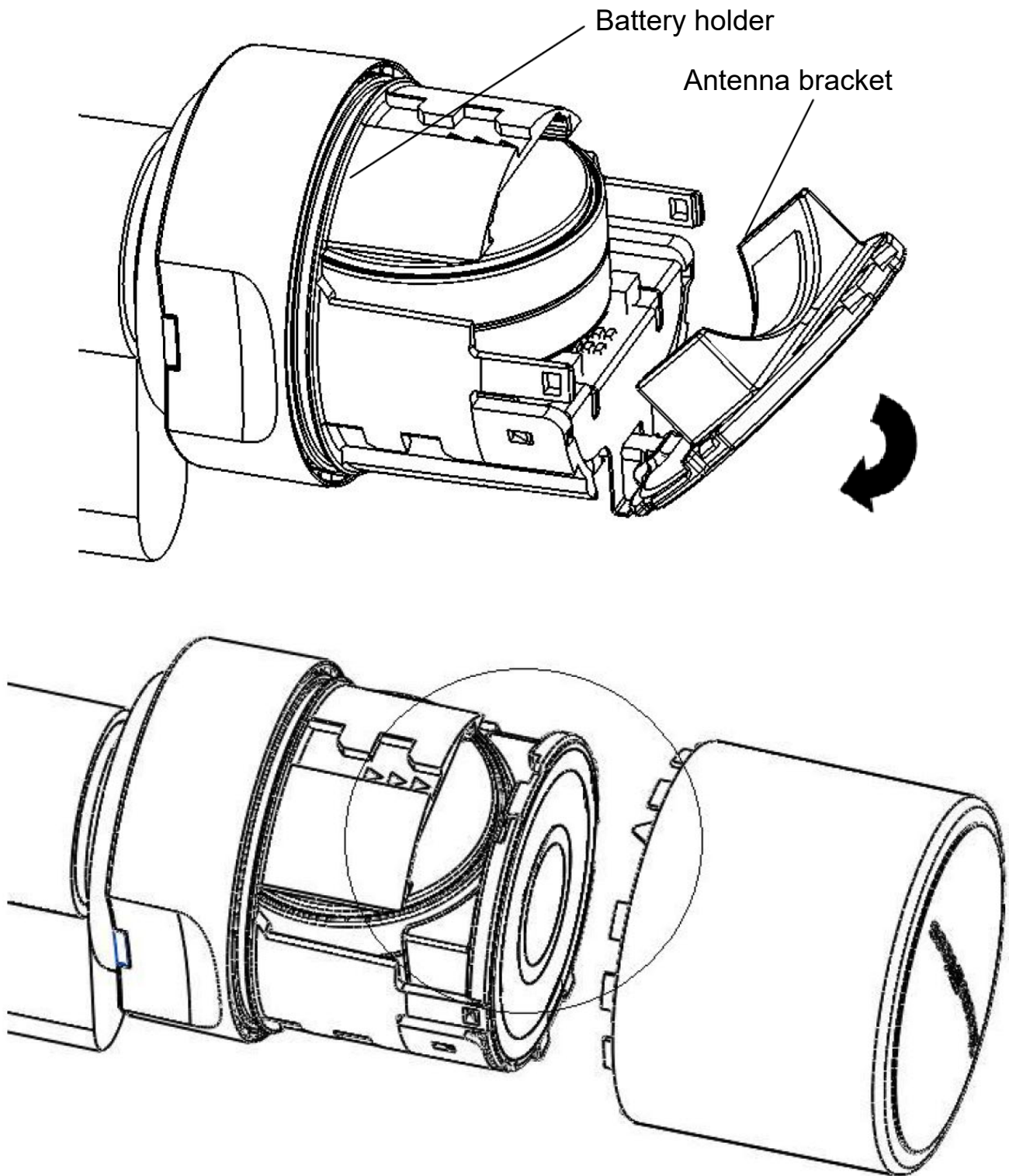
## 7 Battery warnings for active version

1. Place the installation/battery key on the knob in such a way that its two teeth lock into the openings in the locking disc; If necessary, turn the knob until both teeth engage into the knob. Important: the battery/installation key must be placed flat on the inside front surface of the recessed grip ring to ensure that the installation tool can engage into the locking disc.
2. Hold the knob firmly and carefully turn the battery/installation key about 30° in a clockwise direction (until you hear a click).
3. Remove battery/installation key from the knob.
4. Push recessed grip ring backwards towards the padlock, so that it comes away from the thumb-turn.
5. Hold recessed grip ring, turn knob about 10° in an anti-clockwise direction and remove.
6. Carefully remove both batteries from the holder.
7. Insert the new batteries into the holder at the same time with the positive poles next to each other; change the batteries as quickly as possible. Use clean gloves free of fat or grease to handle new batteries.
8. Replace the knob (align the triangle marks as in the diagram) and turn about 10° in a clockwise direction.
9. Push recessed grip ring back onto the knob, so that the knob and ring close together in a flush fit.
10. Place the installation/battery key on the knob in such a way that its two teeth lock into the openings in the locking disc; If necessary, turn the knob until both teeth engage into the knob.
11. Lock the knob into place again by turning it about 30° in an anti-clockwise direction (until you hear a click).



## 8 Battery replacement (Passive) SC version

1. Place the installation/battery key on the knob in such a way that its two teeth lock into the openings in the locking disc; If necessary, turn the knob until both teeth engage into the knob. Important: the battery/installation key must be placed flat on the inside front surface of the recessed grip ring to ensure that the installation tool can engage into the locking disc.
2. Hold the knob firmly and carefully turn the battery/installation key about 30° in a clockwise direction (until you hear a click).
3. Remove battery/installation key from the knob.
4. Push recessed grip ring backwards towards the padlock, so that it comes away from the thumb-turn.
5. Hold recessed grip ring firmly and turn knob about 10° in an anti-clockwise direction and remove.
6. Carefully press the battery holder together where you see three small arrows, so that the antenna bracket disengages.
7. Carefully fold the antenna bracket out (see diagram); do not apply any mechanical load to it.
8. Optional: If a network card has been fitted, carefully remove it from the holder.
9. Remove the top battery from the holder.
10. Turn the knob 180°, so that you can remove the second battery. The battery will then automatically drop from the holder.
11. Insert the new batteries into the holder at the same time with the positive poles next to each other; change the batteries as quickly as possible. Use clean gloves free of fat or grease to handle new batteries.
12. Carefully lock the antenna bracket back into place. In doing so, ensure that both sides lock firmly into place.
13. Replace the thumb-turn (align the three triangle marks as in the diagram) and turn about 10° in a clockwise direction (see diagram).
14. Push recessed grip ring back onto the knob, so that the knob and ring close together in a flush fit.
15. Place the battery/installation key on the knob in such a way that its two teeth lock into the openings in the locking disc; if necessary, turn the knob until both teeth engage into the knob.
16. Lock the knob into place again by turning it about 30° in an anti-clockwise direction (until you hear a click).



## 9 Maintenance, cleaning and disinfection



### NOTE

Digital padlocks **MUST** not come into contact with oil, grease, paint or acids.



### NOTE

The use of unsuitable or aggressive disinfectants can damage the locking cylinder.

Clean the padlock with a soft, damp cloth if necessary.

Only use disinfectants explicitly suitable for the disinfection of sensitive metal surfaces and plastic.

Empty batteries always must be replaced by new ones approved for use by SimonsVoss. Dispose of old batteries in the proper manner.

## 10 Technical specifications

<b>Padlock with shackle 8 mm in diameter</b>	
Locking device dimensions (W x H x D)	51 x 70 x 25 mm ( <i>without cylinder knob or shackle</i> )
Inside height of shackle	25 mm or 60 mm (manual locking or self-locking respectively)
Locking device protection class	Class 3 as per EN 12320
<b>Padlock with shackle 11 mm in diameter</b>	
Locking device dimensions (W x H x D)	60 x 72.5 x 25 mm ( <i>without cylinder knob or shackle</i> )
Inside height of shackle	Manual locking: 35 mm Self-locking: 50 mm
Locking device protection class	Class 4 as per EN 12320
<b>Technical specifications for the locking device</b>	
Battery type	2x CR2450 3V lithium ( <i>Murata, VARTA, Panasonic</i> )
Battery life 3060 and MobileKey	Active: Up to 10 years standby or 300,000 activations Passive: Up to 6 years standby or 60,000 activations
Battery life SmartIntego	Wireless Online (WO): Up to 5 years standby or 80,000 activations SimonsVoss Virtual Card Network (SVCN): Up to 6 years standby or 50,000 activations
Protection rating	IP66
Temperature range	Operational: -25°C to +65°C Storage: -35°C to +65°C
Loggable access events (.ZK)	Up to 3,000
Time zone groups (.ZK)	100+1 (G2)
Number of media which can be managed per padlock	Transponders: up to 64,000 (G2) Smart cards (G2): up to 32,000 (depending on the configuration / template selected)



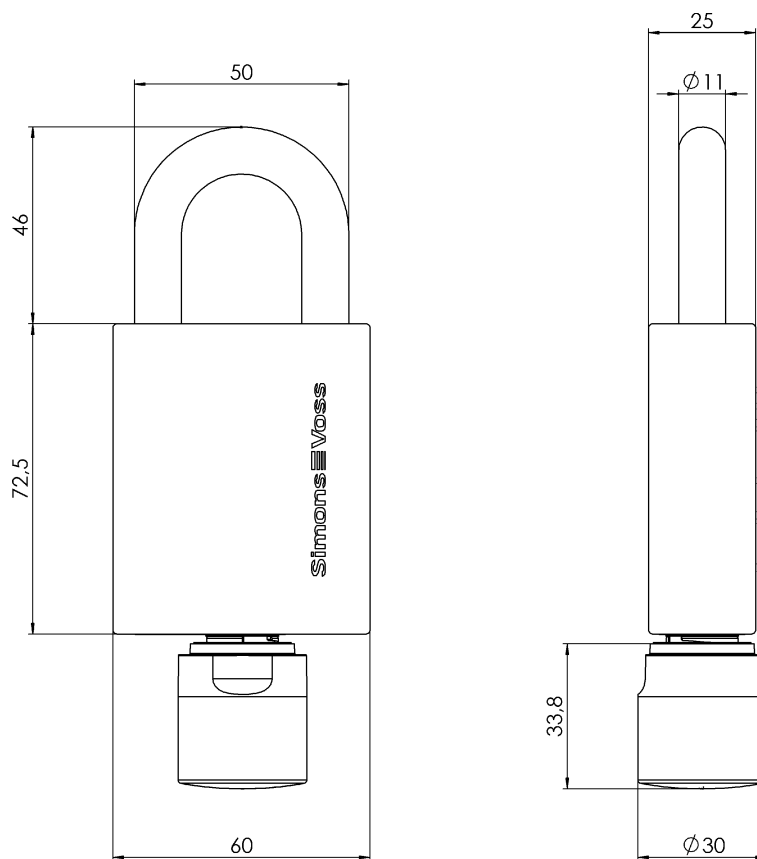
Networking capability	Directly network-ready with integrated LockNode; LockNode can be retrofit
Other information	Version with access control, time zone control and event logging
Permanent/open modes	Time-controlled flip-flop mode (time change-over) possible: time-controlled automatic or time-controlled manual engage and disengage (using transponder). A transponder can be optionally used to interrupt the engage procedure

Radio emissions		
SRD (depending on equipment)	24.50 kHz - 25.06 kHz	-20 dB $\mu$ A/m (10 m distance)
RFID (depending on equipment)	13.564 MHz - 13.564 MHz	-19.57 dB $\mu$ A/m (10 m distance)
SRD (WaveNet) (depending on equipment)	868.000 MHz - 868.600 MHz	<25 mW ERP

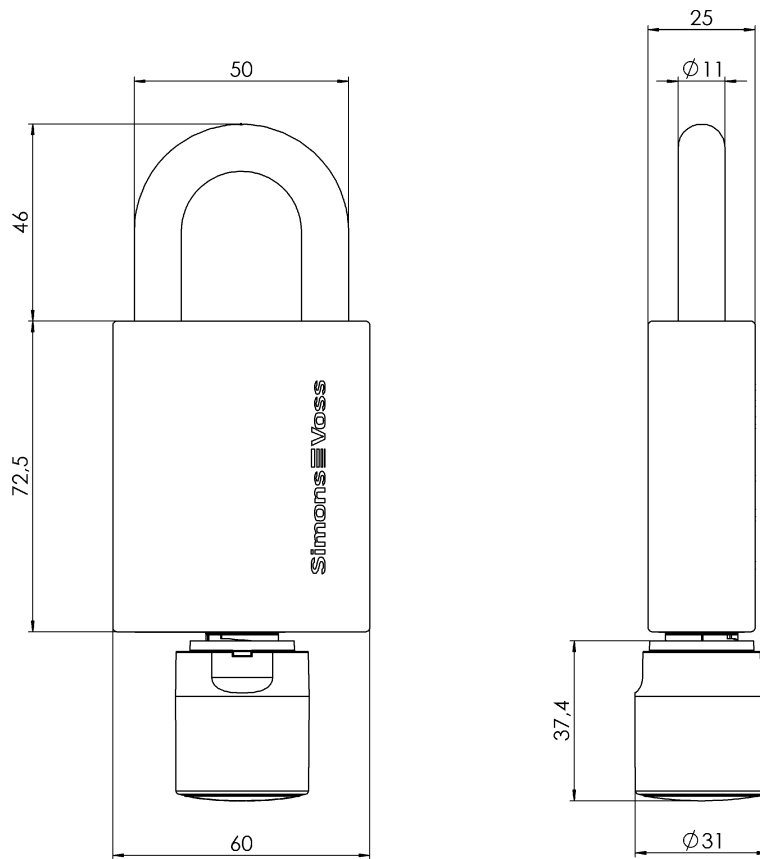
There are no geographical restrictions within the EU.

### 10.1 Dimensional drawings padlocks

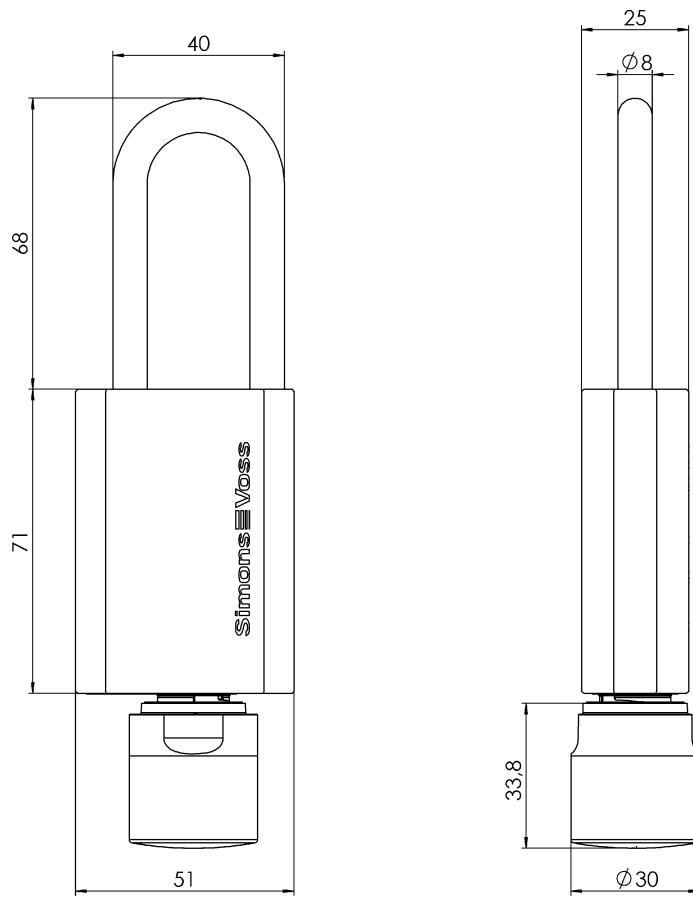
#### Padlock 11 mm - Active (PL)



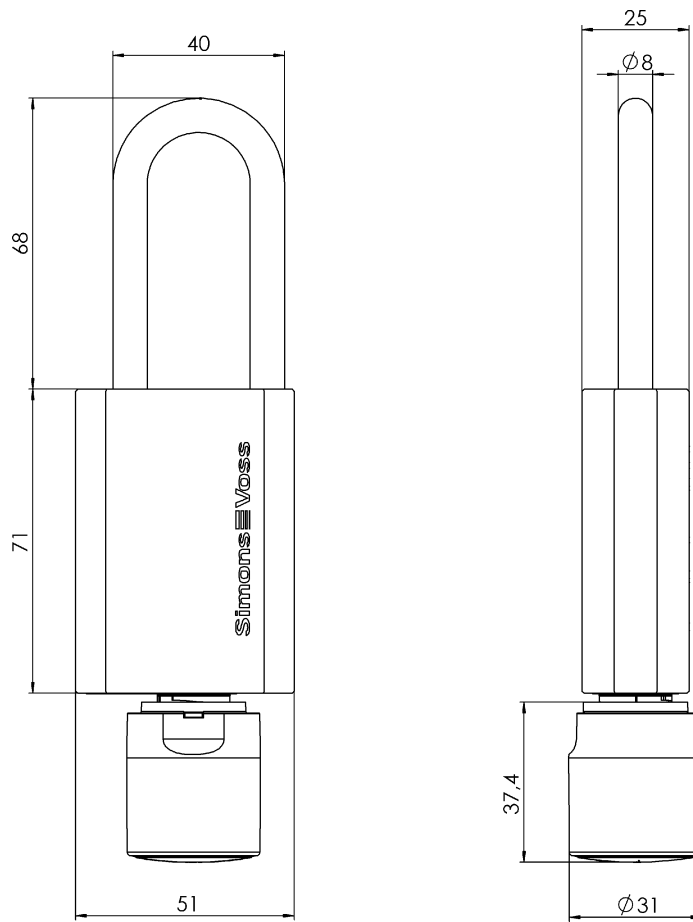
Padlock 11 mm - Passive (PL MP)



Padlock 8 mm - Active (PL)



Padlock 8 mm - Passive (PL MP)



## 11 Declaration of conformity

The company SimonsVoss Technologies GmbH hereby declares that article Z4.PL.\*, SI.Z4.PL.\*, MK.Z4.PL.\* complies with the following guidelines:

- 2014/53/EU "Radio equipment"
- 2014/30/EU "EMC"
- 2011/65/EU "RoHS"
- 2012/19/EU "WEEE"
- and regulation (EG) 1907/2006 "REACH"

The full text of the EU Declaration of conformity is available at the following internet address: <https://www.simons-voss.com/en/certificates.html>.



## 12 Help and other information

### Information material/documents

You will find detailed information on operation and configuration and other documents under Informative material/Documents in the Download section on the SimonsVoss website (<https://www.simons-voss.com/en/downloads/documents.html>).

### Instruction manuals

You will find detailed information on operation and configuration online on our homepage at [www.smartintego.com](http://www.smartintego.com).

### Declarations of conformity

You will find declarations of conformity for this product in the Certificate section on the SimonsVoss website (<https://www.simons-voss.com/en/certificates.html>).

### Information on disposal

- Do not dispose the device (Z4.PL.\*, SI.Z4.PL.\*, MK.Z4.PL.\*) in the household waste. Dispose of it at a collection point for electronic waste as per European Directive 2012/19/EU.
- Recycle defective or used batteries in line with European Directive 2006/66/EC.
- Observe local regulations on separate disposal of batteries.
- Take the packaging to an environmentally responsible recycling point.



### Hotline

If you have any questions, the SimonsVoss Service Hotline will be happy to help you on +49 (0)89 99 228 333 (German fixed network; call charges vary depending on the operator).

### Email

You may prefer to send us an email.

[support-simonsvoss@allegion.com](mailto:support-simonsvoss@allegion.com) (System 3060, MobileKey)

[si-support-simonsvoss@allegion.com](mailto:si-support-simonsvoss@allegion.com) (SmartIntego)

**FAQs**

You will find information and help for SimonsVoss products in the FAQ section on the SimonsVoss website (<https://faq.simons-voss.com/otrs/public.pl>).

**Address**

SimonsVoss Technologies GmbH  
Feringastrasse 4  
85774 Unterföhring  
Germany





## This is SimonsVoss

SimonsVoss is a technology leader in digital locking systems.

The pioneer in wirelessly controlled, cable-free locking technology delivers system solutions with an extensive product range for SOHOs, SMEs, major companies and public institutions.

SimonsVoss locking systems unite intelligent functions, optimum quality and award-winning German-made design. As an innovative system provider, SimonsVoss attaches great importance

to scalable systems, effective security, reliable components, high-performance software and simple operation.

Our commercial success lies in the courage to innovate, sustainable thinking and action, and heartfelt appreciation of employees and partners. With its headquarters in Unterföhring, near Munich, and its production site in Osterfeld, eastern Germany, the company employs around 300 staff in eight countries.

SimonsVoss is a company in the ALLEGION Group, a globally active network in the security sector. Allegion is represented in around 130 countries worldwide ([www.allegion.com](http://www.allegion.com)).

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