



Superlink C

Instructions for use

Table of Contents

1.	Identification	5
1.1.	Document	5
1.2.	Equipment	5
1.3.	Manufacturer	5
1.4.	Support	5
1.5.	Legal Provisions	5
2.	General	7
2.1.	General information	7
2.2.	Compliance with standards and directives	7
2.3.	Aim of device documentation	7
2.3.1.	Scope	7
2.3.2.	Audience	7
2.3.3.	Accessibility of the Document	7
2.3.4.	Further Information	7
2.4.	Equipment identification	8
2.5.	Procedure for technical support	8
2.6.	Exchange and Return	9
2.7.	Disposal	9
2.8.	Warranty	9
2.9.	Illustrations	9
3.	Safety	11
3.1.	Introduction	11
3.1.1.	Principle	11
3.1.2.	Importance of the safety instructions	11
3.1.3.	Failure to observe the safety regulations	11
3.1.4.	Personnel Qualification	12
3.1.5.	Intended Use	12
3.2.	General icons	13
3.3.	General rules	14
3.3.1.	Occupational Safety	14
3.3.2.	Operational safety	14
3.3.3.	Product Safety	14
4.	Description	15
4.1.	Operating principle and application	15
4.2.	Box content	15
4.3.	Description and component location	16
4.4.	Put in commissioning mode	18
4.5.	LED status	19
4.6.	Dimensions	19
4.7.	Technical data	21
4.7.1.	Power supply and reading intervals	22

4.7.2.	Radio communication	23
5.	Mounting	25
5.1.	Placing Superlink C	25
5.2.	Opening Superlink C	26
5.2.1.	Security seal removal	26
5.2.2.	Upper-case cover removal	27
5.3.	Mounting	28
5.3.1.	230 V model	28
5.3.2.	Battery model	31
5.3.3.	Battery pack model	32
5.4.	Before closing	34
5.4.1.	Antenna connectors	34
5.4.2.	SIM card	35
5.4.3.	Superlink C first start-up	36
5.5.	Closing Superlink C	38
5.6.	Remote antenna	39
5.6.1.	NB-IoT, LTE-M antenna	39
5.6.2.	Sontex radio antenna	41
5.6.3.	wM-Bus / OMS antenna	42
6.	Maintenance	43
6.1.	Battery change	43
6.2.	Battery pack change	44
6.3.	Backup battery change	46
6.4.	Firmware update	47
7.	Troubleshooting	49
7.1.	NB-IoT LEDs status	49

PAGE INTENTIONALLY LEFT BLANK

1. Identification

1.1. Document

Type: Instructions for use

Language: EN

Revision	Date	Author	Description
22/10	14.10.2022	RédaTech	First edition.
23/01	19.01.2023	RédaTech	New electronic board and UKCA marking.

Table 1: Revision

1.2. Equipment

Name: Superlink C

Type: Gateway that enables flexible readouts of OMS and Sontex radio device consumption data in conjunction with the Sonexa Platform, while ensuring EED compliance.

1.3. Manufacturer

Sontex SA
Rue de la gare 27
CH-2605 Sonceboz
Switzerland

Phone: +41 32 488 30 00

E-mail: sontex@sontex.ch

Internet: www.sontex.ch

1.4. Support

Phone: +41 32 488 30 04

E-mail: support@sontex.ch

Internet: support.sontex.ch

1.5. Legal Provisions

The information contained in this document is the property of Sontex SA. Publication, in whole or in part, requires the written consent of Sontex SA. Any internal reproduction intended for evaluation of the product or its proper use is permitted and not subject to authorization.

The original version of the document was written in English. In case of doubt, the English version is authoritative.

© Copyright Sontex SA, 2023. is a registered trademark. All rights reserved.

PAGE INTENTIONALLY LEFT BLANK

2. General

2.1. General information

This document was drawn up based on the information available at the time of publication.

The original version was drawn up in English.

The information contained in this document is the property of Sontex. It has been set out for internal use by the end customer, to the exclusion of any other usage.

2.2. Compliance with standards and directives

The  marking indicates that this product meets the requirements of the European directives and UK Conformity Assessment in terms of health, safety, environmental and user protection.

It meets the following directives:

- EN 62368
- RED 2014/53/EU

2.3. Aim of device documentation

This manual provides all the information required for the correct use of the equipment including: product identification, safety, installation, commissioning, troubleshooting, maintenance and disposal.

2.3.1. Scope

This documentation refers to the Sontex Superlink C.

2.3.2. Audience

This document is intended for system operators and installers of the Superlink C .

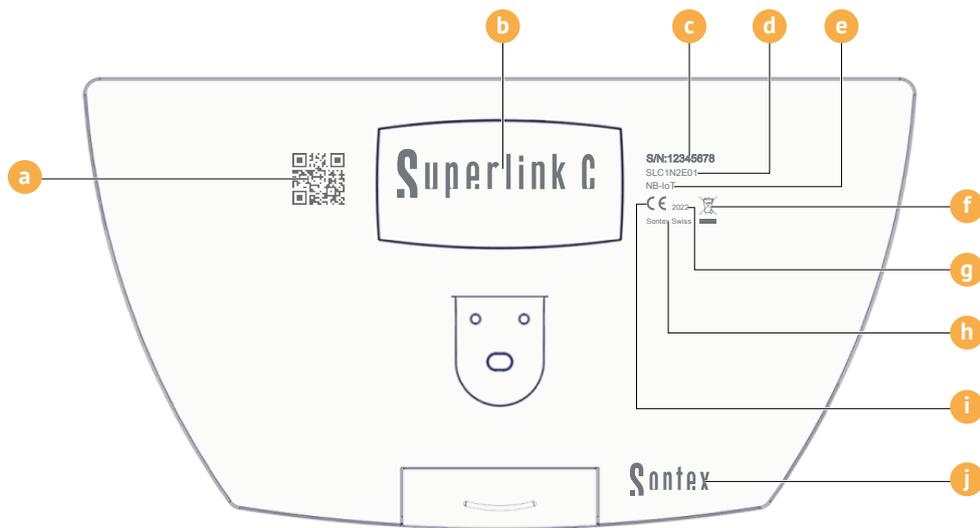
2.3.3. Accessibility of the Document

The system operator must ensure that this document is accessible to the responsible personnel at all times. If the original document is lost, an up-to-date version can be down-loaded from our extranet (<https://extranet.sontex.ch/index>).

2.3.4. Further Information

Links to further information can be found at www.sontex.ch.

2.4. Equipment identification



a	QR code (URL + Part nb + Serial nb + Access code)	b	Product name
c	Serial number	d	Part number
e	IoT identification	f	Disposal instruction [► 9]
g	Production year	h	Manufacturer [► 5]
i	Conformity marking [► 7]	j	Manufacturer or customer logo

2.5. Procedure for technical support

Procedure to follow for any technical support request:

1. Collect the required information for a technical assistance request.
 - [Equipment identification ► 8].
 - Description of the device problem.
2. Please refer to the [Troubleshooting ► 49].
3. If the problem persists contact your supplier.

2.6. Exchange and Return

In the event of repair, factory calibration, incorrect delivery or order, the Superlink C must be returned. As an ISO-certified company, Sontex is required by law to handle all returned products in a specific manner.

To ensure a safe, professional and fast return of your device:

1. Refer to the Sontex web-site for procedures and conditions.
2. Use our Return of goods form.

→ <https://sontex.ch/wp-content/uploads/2019/10/sontex-product-return-form-en.pdf>

2.7. Disposal

To preserve and protect the environment and reduce waste of natural resources and pollution, the European Commission has adopted a directive whereby electrical and electronic equipment is taken back by the manufacturer for proper disposal or recycling

If you carry out the disposal, the Superlink C must be disposed of under the applicable local environmental regulations. Find out about recycling opportunities in your region

This symbol indicates that electrical and electronic equipment must be disposed of separately.

The following applies to consumers in European countries:

- This product must be disposed of separately at a suitable collection point. Do not dispose of it with your household waste!
- Through separate disposal and recycling, natural raw materials can be preserved and the harmful consequences for human health and the environment caused by incorrect disposal can be prevented.
- Further information can be obtained from your specialist dealer or from the authorities or companies responsible for waste disposal.



2.8. Warranty

Please contact your local Sontex representative for warranty information.

2.9. Illustrations

Depending on the configuration of your Superlink C , it can be mounted with a battery, battery pack or 230 V power supply. The 230 V power supply is used to illustrate this document, however, when necessary, the other configurations are illustrated.

PAGE INTENTIONALLY LEFT BLANK

3. Safety

3.1. Introduction



The user must have read and understood all the instructions in the Instructions for use before carrying out any actions or operations on the Superlink C .



Sontex accepts no liability if these instructions have not been observed.

3.1.1. Principle

DANGER



**Failure to observe these safety instructions
Risk of accidents, even death**

Technical using the Superlink C must read and strictly follow these instructions.



For more information, contact the manufacturer or your local representative.

These instructions are also applicable to the options, components, installations, devices and systems relating to the equipment.

3.1.2. Importance of the safety instructions

All the safety and protection instructions in this manual must be observed to prevent reversible or irreversible personal injury, material damage or pollution of the environment. Furthermore, the legal regulations, the accident prevention and environmental protection measures, and the recognized technical regulations for appropriate and safe working procedures that are in force in the country and place of use of the machine must be observed.

3.1.3. Failure to observe the safety regulations

Any failure to observe the safety and protection regulations, or the legal and technical regulations in place, may lead to reversible or irreversible personal injury, material damage or pollution of the environment.

3.1.4. Personnel Qualification

Personnel responsible for installation, commissioning, diagnosis and maintenance must:

- Be trained and qualified to perform these functions.
- Be authorized by the plant operator.
- Be familiar with the relevant standards and directives and with national regulations.
- Read and understand instructions and additional documentation as well the relevant certificates.
- Follow instructions and general conditions.
- Be trained in the handling of hazards and risks involved in the installation and operation of electrical devices and systems.

Operating personnel must also:

- Be instructed and authorized by the plant operator in the task requirements.
- Follow the instructions in this document.

3.1.5. Intended Use

The gateway Superlink C gathers measurement data sent by measurement equipment via radio communication options (Sontex and wM-Bus). It can be used universally in industry, district heating and building services engineering.

- The manufacturer is not liable for damage resulting from improper use. Modifications and changes to the device must not be made.
- The Superlink C may only be operated within the conditions specified in the technical specification.
- Seals may not be removed except by authorized persons. Country-specific and local regulations as well as the manufacturer's instructions must be observed. The manufacturer assumes no responsibility for changes to the data relevant for calibration and measurement if the factory seal has been broken.
- If several heat meters are used in one billing unit, the same device types and installation positions should be selected to ensure that heat consumption is measured as fairly as possible.

3.2. General icons

DANGER



This combination of symbol and keyword indicates an immediately hazardous situation liable to cause death or personal injury unless prevented.

WARNING



This combination of symbol and keyword indicates a potentially hazardous situation capable of causing death or personal injury unless prevented.

CAUTION



This combination of symbol and keyword indicates a potentially hazardous situation capable of causing minimal or minor personal injury unless prevented.

Notice



This combination of symbol and keyword indicates a potentially dangerous situation which, if not prevented, is capable of causing material damage.



Directive or measure to be applied.



Informative comment.



Suggestion, advice or help in case of problems.



Reference to other documentation.

3.3. General rules

3.3.1. Occupational Safety

 **DANGER**

 **Electrical current**
Risk of electrocution

1. Wear the protective equipment required under national regulations.

3.3.2. Operational safety

 **DANGER**

 **Electrical current**
Risk of electrocution

1. Operate the device only when it is in a fault-free and safe condition.
2. The operator is responsible for the trouble-free operation of the device.

Modifications to the device

Notice

 **Unauthorized modifications**
Risk of equipment malfunction

If modifications are nevertheless necessary, consult your local representative or Sontex SA.

Repair

To ensure continued operational safety:

- Only carry out repairs to the electronic device if these are expressly permitted.
- Observe the national regulations concerning the repair of an electrical and electronic devices.
- Only use original Sontex spare parts and accessories.

Environmental requirements

If the plastic housing of the Superlink C is permanently exposed to certain vapor-air mixtures, the housing may be damaged.

- Contact your Sontex sales office for assistance.
- For use in areas subject to approval: See the information on the nameplate.

3.3.3. Product Safety

The Superlink C has been built and tested in accordance with good, state of the art engineering practice to ensure it's safe operation; it left the factory in technically perfect condition.

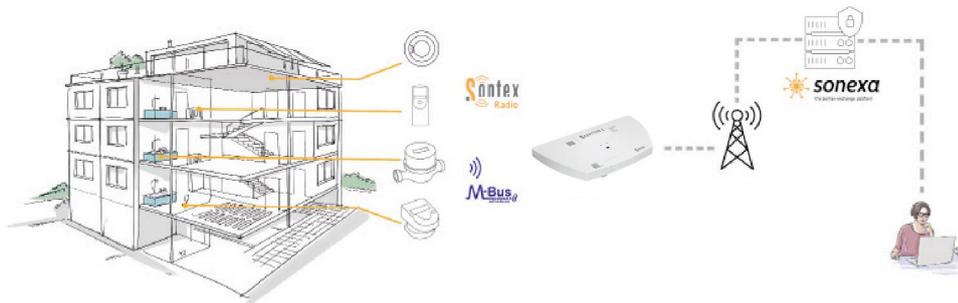
It meets the general safety and legal requirements. It also conforms to the EC directives listed in the device-specific EC Declaration of Conformity. Sontex SA confirms this by affixing the CE mark.

4. Description

4.1. Operating principle and application

The Superlink C is a gateway that, in conjunction with the Sonexa Platform, enables flexible consumption data to ensure EED compliance. Consumption data from wM-Bus / OMS radio (868 MHz unidirectional) and Sontex (433 MHz bidirectional) radio devices are collected by the Superlink C gateway and securely transmitted to the Sonexa Platform via NB-IoT. Depending on the power supply of the gateway, the consumption data can be received at selectable time intervals and can be used for consumption calculation or statistical processing.

In addition, the Superlink C has a USB interface that allows it to be configured with the Superprog software if necessary.



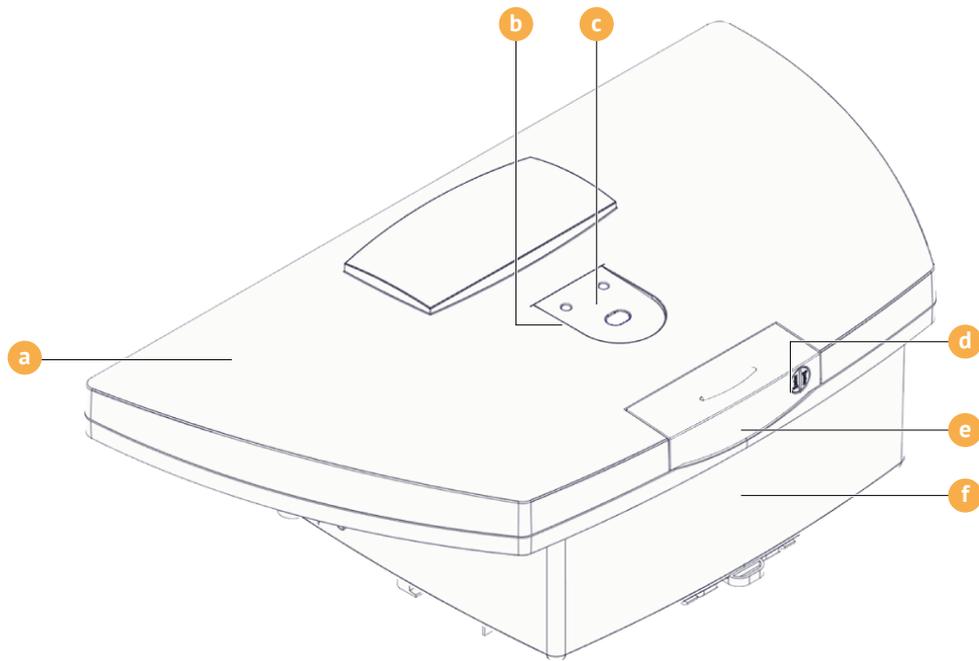
4.2. Box content

The following equipment are included in the scope of delivery for the Superlink C:

- Superlink C (battery, battery pack or 230 V configuration).
- 60 Ah or 120 Ah battery pack (only for battery pack configuration).
- Drilling template.
- Fixing plugs, screws and washers.
- Two security seals.
- SIM card (optional).
- Installation guide.

4.3. Description and component location

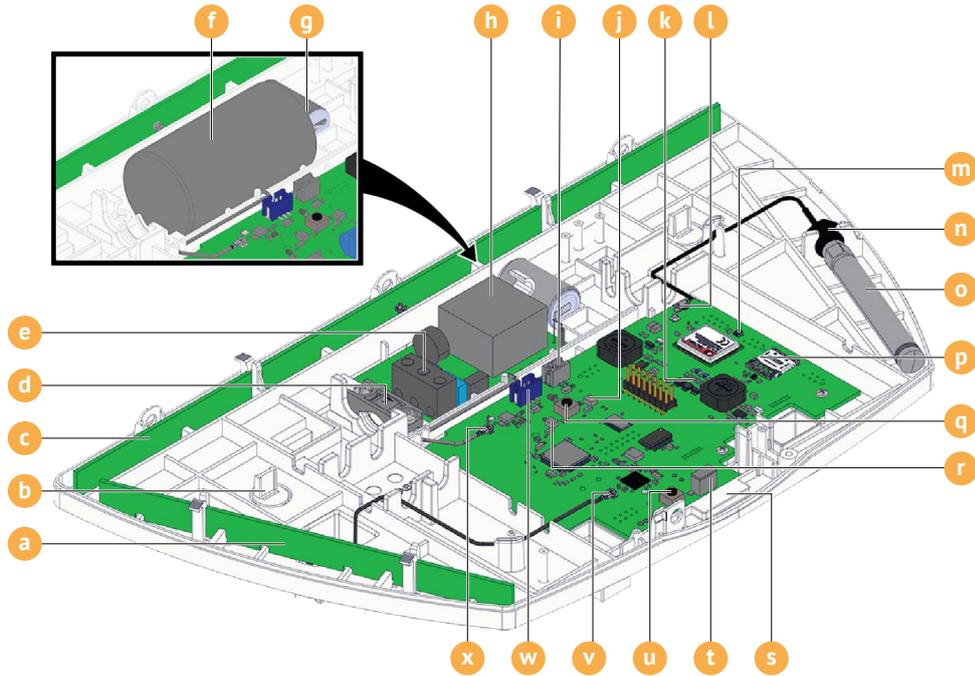
External view



a	Superlink C
c	Green status LED [▶ 19]
e	Lid [▶ 26]

b	Orange status LED [▶ 19]
d	Security seal [▶ 26]
f	Battery pack (optional) [▶ 21]

Internal view

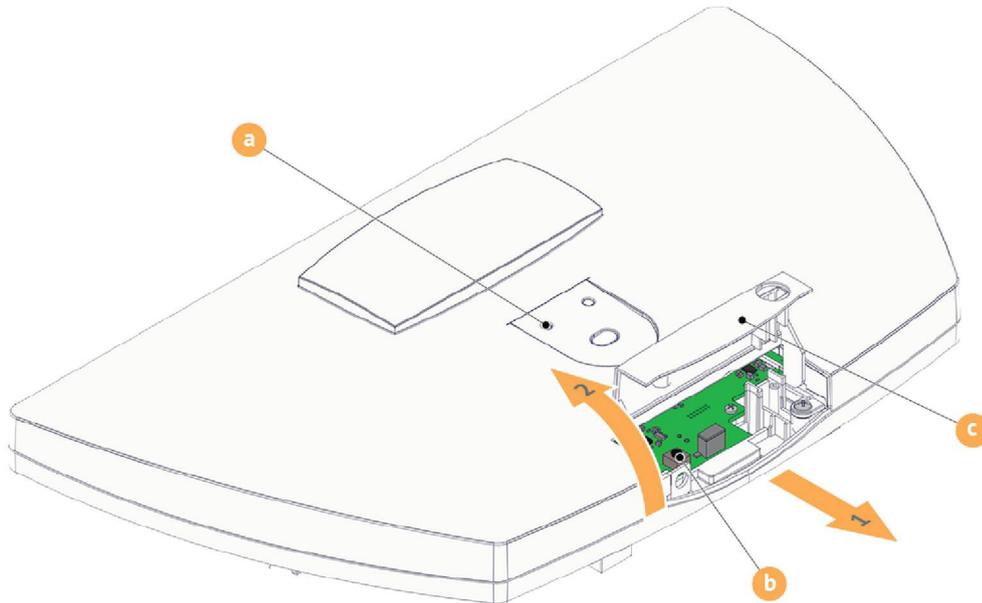


a	wM-Bus / OMS antenna [▶ 23]	b	Passage for antenna extension cable [▶ 39]
c	Radio Sontex antenna [▶ 23]	d	Cable tie [▶ 28]
e	230 V cable connector [▶ 21]	f	Battery power supply [▶ 21]
g	Backup battery [▶ 46]	h	230 V power supply [▶ 21]
i	Backup battery connector [▶ 46]	j	Green status LED [▶ 19]
k	NB-IoT module LEDs [▶ 49]	l	NB-IoT antenna connector
m	NB-IoT module	n	NB-IoT antenna connector [▶ 39]
o	NB-IoT antenna [▶ 23]	p	SIM card slot [▶ 35]
q	Reset button [▶ 32]	r	Orange status LED [▶ 19]
s	Serial number	t	USB connector (mini A) [▶ 35]
u	Sonexa Platform button (commissioning button, connects with Sonexa Platform) [▶ 18]	v	wM-Bus / OMS antenna connector [▶ 42]
w	Battery pack power connector [▶ 32]	x	Radio Sontex antenna connector [▶ 41]

4.4. Put in commissioning mode

In constant communication mode, Superlink C opens communication with all the devices included in the projects. It is very useful for installation and debugging.

1. If necessary, remove the seal.
→ See [Security seal removal ▶ 26].



2. Pull the lid **c**.
3. Open the lid **c**.
4. Press the Sonexa Platform button **b** for three seconds.
 - The orange status LED **a** blinks three times.
 - Superlink C is connected to Sonexa Platform, checks the correct date and time, downloads any pending tasks from the Sonexa Platform message queue, executes them and stays in commissioning mode.



Closing communication can only be done from Sonexa Platform!

4.5. LED status

Orange LED

The orange LED informs about Superlink C communication.

Communication type	LED
Sontex radio	Irregular blinking during communication
wM-Bus /OMS	Regular blinking during communication
Control of pending tasks (a short press on the Sonexa Platform button)	Blinks one time
Connecting to Sonexa Platform (a three second press on the Sonexa Platform button)	Blinks three times

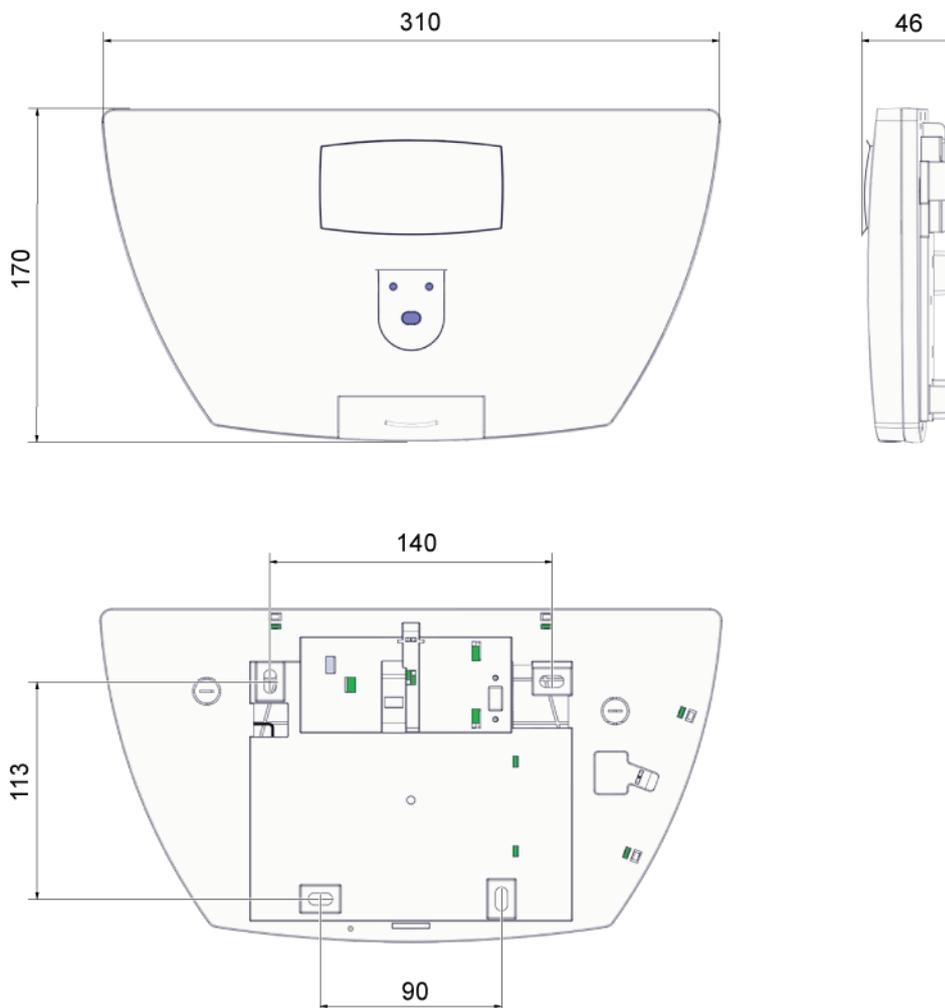
Green LED

The green LED informs about Superlink C power supply.

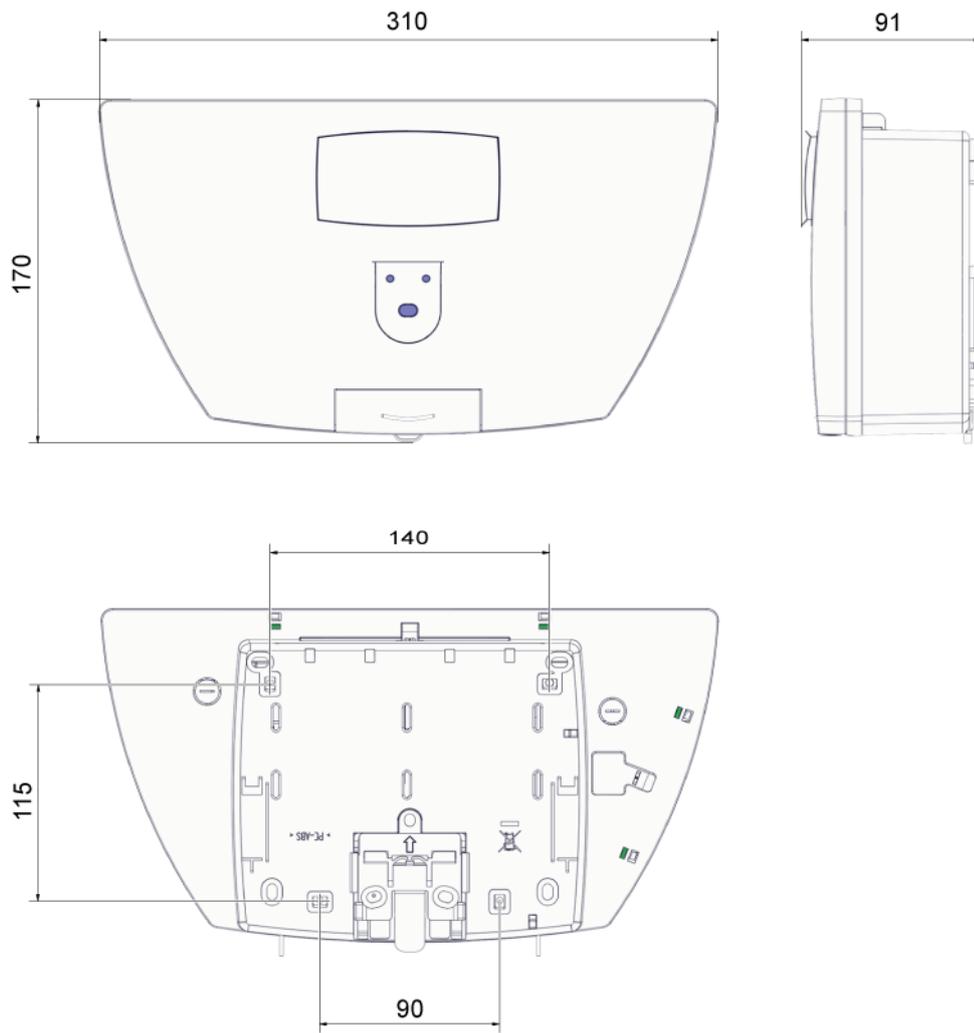
Power supply	LED
Battery or battery pack	Blinks every 4 seconds
230 V	Stays lighted
Backup battery	Blinks every 8 seconds

4.6. Dimensions

With battery or mains power



With battery pack



4.7. Technical data

General	<ul style="list-style-type: none"> ■ Weight (net) 0.555 kg (version with 1 D cell) 1.040 kg (version with 60 Ah battery pack) 1.360 kg (version with 120 Ah battery pack) 0.500 kg (version with 230 VAC power supply) ■ Cable entries Two in the bottom of the housing ■ Interface connection Access protected by a lead seal
Mounting	<ul style="list-style-type: none"> ■ Wall mounting Through 4 holes in the housing bottom
Protection class	<ul style="list-style-type: none"> ■ Housing IP40, except for the cable passages
Flammable class	<ul style="list-style-type: none"> ■ Housing According to UL94 V2
Temperature	<ul style="list-style-type: none"> ■ Operation 5°C à 55°C ■ Storage -10°C à 60°C (dry environment)
Interfaces	<ul style="list-style-type: none"> ■ USB Standard NB-IoT, LTE-M Standard
Power supply	<ul style="list-style-type: none"> ■ Main power supply module 110-240 VAC 50/60 Hz, 0.11 A Grounding according to IEC 60417-6092 Backup 3.6 V Format 1/2AA Lithium ■ Battery 1x 3.6 V Format D Lithium (Li-SOCI2) + Backup 3.6 V Format 1/2AA Lithium ■ Battery pack 60 Ah 3x 3.6 V D-Format Lithium (Li-SOCI2) + Backup 3.6 V 1/2AA Lithium ■ Battery pack 120 Ah 6x 3.6 V D-Format Lithium (Li-SOCI2) + Backup 3.6 V Format 1/2AA Lithium
Power consumption (230 VAC version)	<ul style="list-style-type: none"> ■ ~5 kWh For 8 hours reading / week

4.7.1. Power supply and reading intervals

The Superlink C gateway is available in several variants to meet customer needs:

- **Battery-powered variants:** flexible and location-independent applications.
- **230 VAC powered variant:** projects requiring a larger reading interval. It is particularly suitable for monitoring and alarms.

Power supply	Battery life (indicative values)	Indicative reading values for Sontex or OMS radio
1 x D-Cell	6 years*	Sontex (up to 200 devices): 1x monthly or OMS: 20' - 2x monthly
3 x D-Cell 60 Ah	> 6 years*	Sontex (up to 250 devices): 2x monthly or OMS: 20' - 2x monthly
6 x D-Cell 120 Ah	> 6 years*	Sontex (up to 250 devices): 4x monthly or OMS: 12' - 1x daily
230 VAC		Sontex (up to 500 devices): Max 1 readout per week or OMS: several time a day

* Operating time when using NB-IoT.

Due to higher power consumption, the operating time is significantly lower when using LTE-M (CAT-M).

4.7.2. Radio communication

Radio	Sontex	wM-Bus / OMS	NB-IoT, LTE-M (CAT-M)
Frequency	433.82 MHz	868.95 MHz	B8 <ul style="list-style-type: none"> ■ 880 – 915 MHz Uplink ■ 925 – 960 Downlink ■ 25 MHz Bandwidth B20 <ul style="list-style-type: none"> ■ 832 – 862 MHz Uplink ■ 791 – 821 Downlink ■ 30 MHz Bandwidth
Communication	Bidirectional	Receiver category 2, according to EN 300-220-1, -2	Bidirectional
Protocol	Radian 0	Wireless M-Bus according to EN 13757-4	HD-FDD
Transmission interval	On demand	-	-
Power	10 mW (10 dBm)	-	-

PAGE INTENTIONALLY LEFT BLANK

5. Mounting

5.1. Placing Superlink C

As Superlink C has to communicate with other devices, his location is important. Although Superlink C has a range of 1 kilometer in free field, indoors, this range decreases and varies greatly depending on the type of construction.



To realize an installation in large buildings, the use of several Superlink C will be necessary.

1. Place Superlink C well in the center of all the equipment it needs to communicate with.
 - Usually, Superlink C communicates easily with equipment installed within 30 meters and placed up to 2 floors above and below.
2. Respect the following indications:
 - Radiant heat and electrical interference fields in the vicinity of the Superlink C must be avoided.
 - Check the design data of the components.
 - The permissible ambient temperature for the Superlink C is 5 to 55 °C.
 - The installation and project planning regulations must be adhered to.
 - The calculator Superlink C faceplate must be legible.



Sontex strongly recommends performing a communication test with other equipment before mounting.

Refer to Sonexa Platform documentation.



To suit any installation location, Superlink C can be equipped with remote antennas.

See [Remote antenna ▶ 39].

5.2. Opening Superlink C

Safety concern only available for 230 V option

DANGER



Electrical current

Risk of electrocution

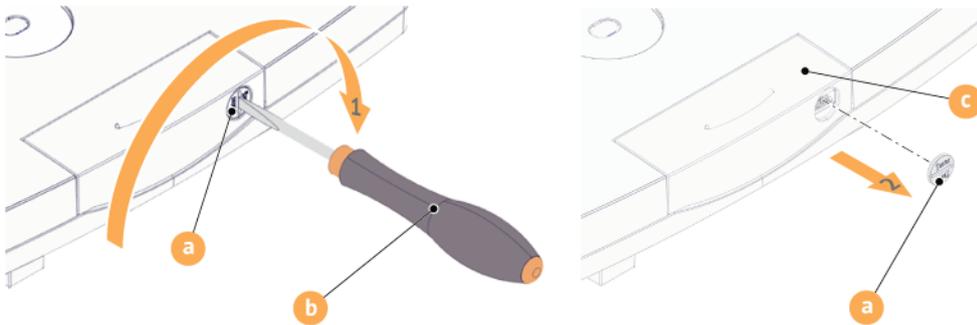
The circuit breaker of the power supply must be switch off before attempting any work on the Superlink C.

Working in the Superlink C involves work on the mains voltage supply. This work must therefore be carried out by a specialist in accordance with the applicable national wiring regulations and electrical operating conditions.

5.2.1. Security seal removal

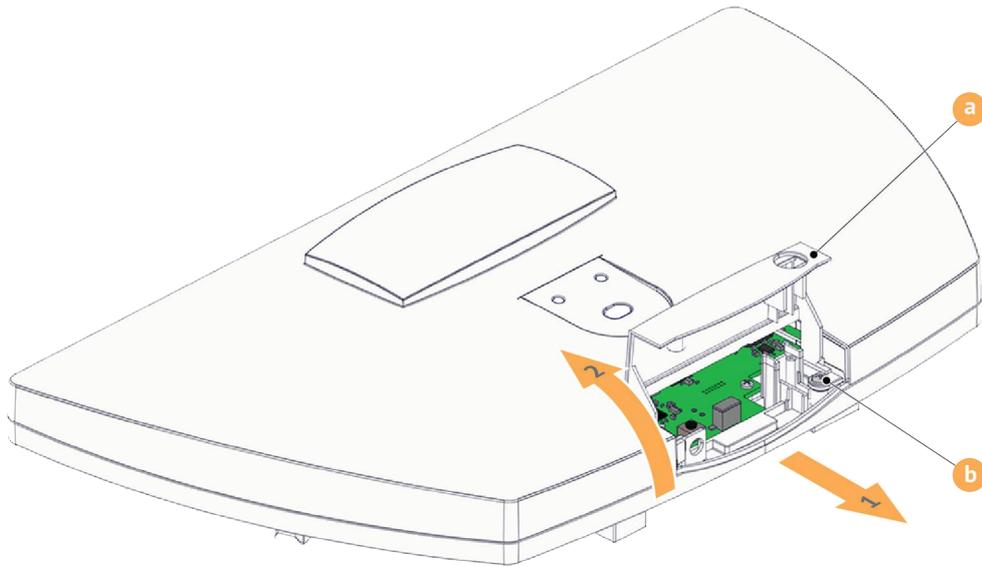


Those steps are only available if Superlink C has already been installed.

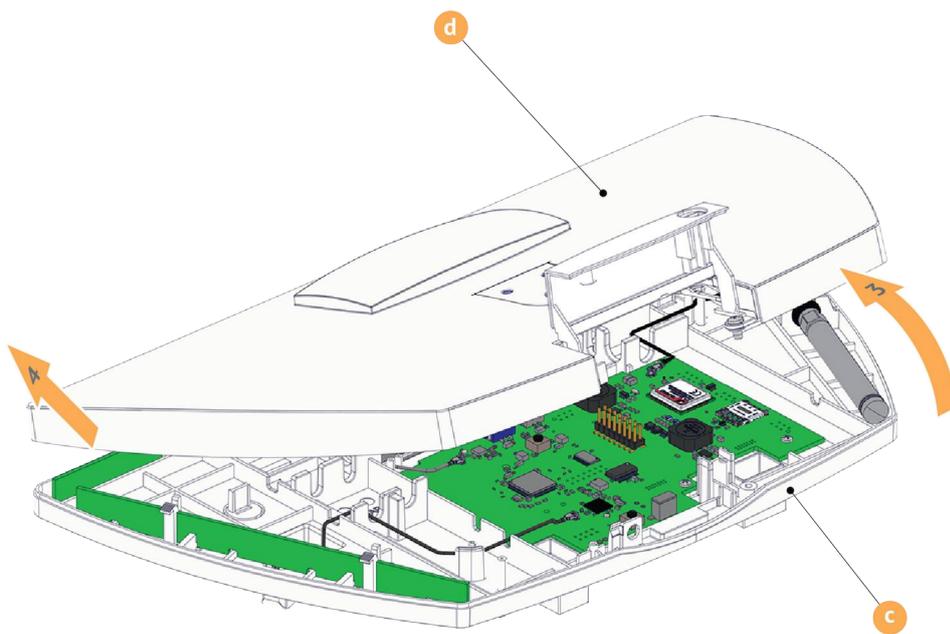


1. Using a screwdriver **b**, turn the security seal **a** until it breaks.
2. Remove the security seal **a** from the lid **c**.

5.2.2. Upper-case cover removal



1. Pull the lid **a**.
2. Open the lid **a** and unscrew the screw **b**.
→ The screw stays attached to the upper-case cover by a washer.



3. Lift slightly the upper-case cover **d**.
4. Remove the upper-case cover **d** from the housing **c**.

5.3. Mounting

Notice



Test before drilling

Risk of non-communication with some devices

Depending of positioning, Superlink C may not be communicating with all its devices.

Sontex strongly recommends using the commissioning mode to test the communication between Superlink C and all the devices before drilling. See [Put in commissioning mode ▶ 18].



The Superlink C can be fixed horizontally or against a wall.

5.3.1. 230 V model

DANGER

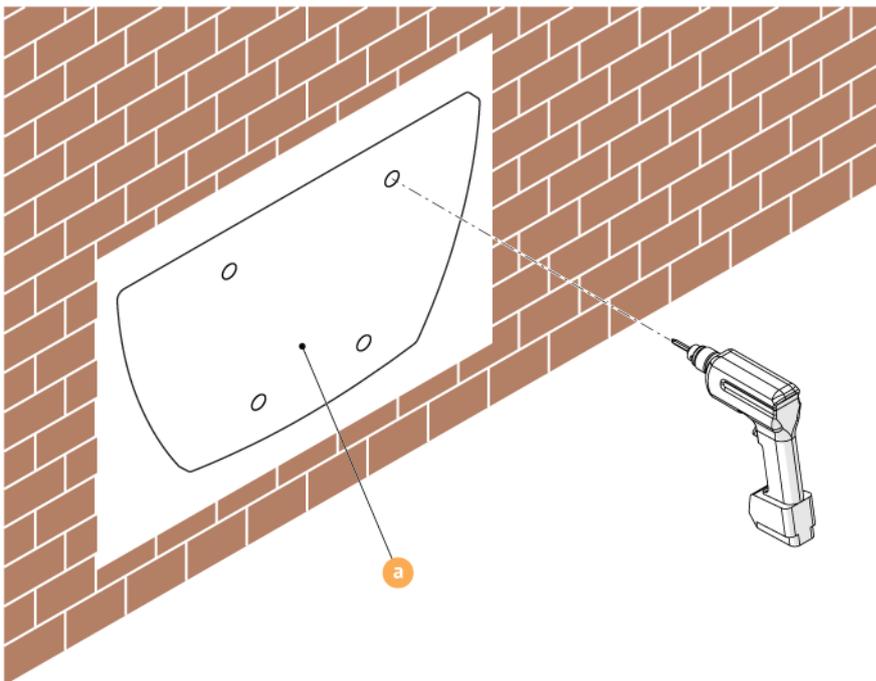


Electrical current

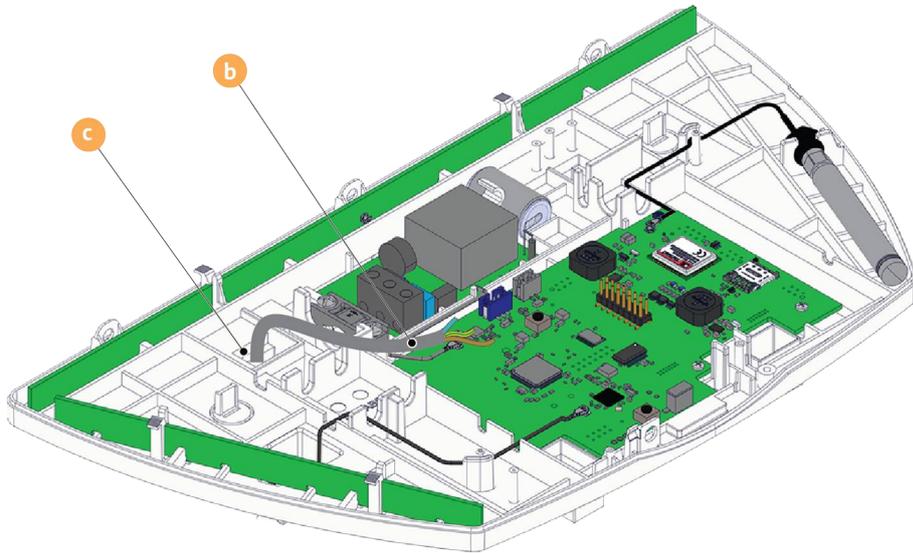
Risk of electrocution

The circuit breaker of the power supply must be switch off and the electrical connection lead must be voltage-free during Superlink C mounting.

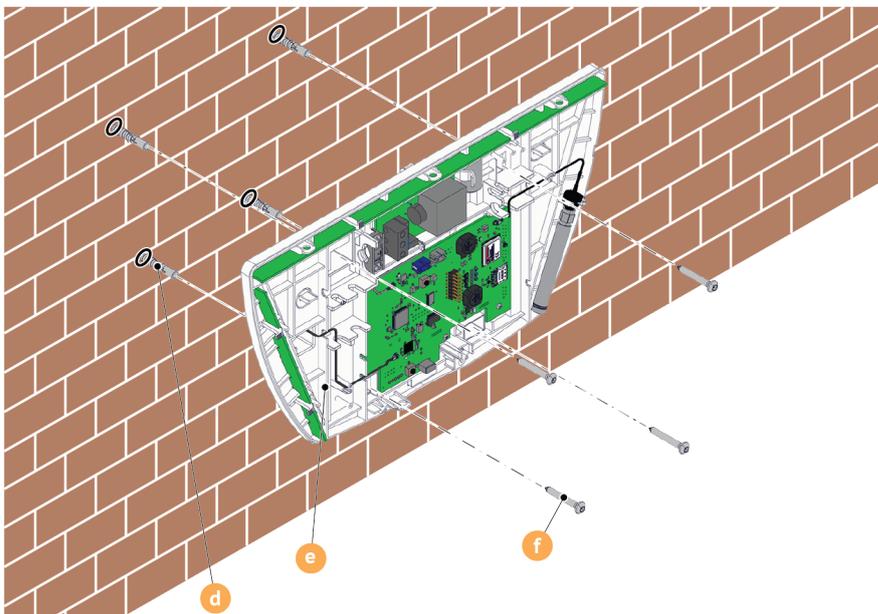
Installing the Superlink C involves work on the mains voltage supply. This work must therefore be carried out by a specialist in accordance with the applicable national wiring regulations and electrical operating conditions.



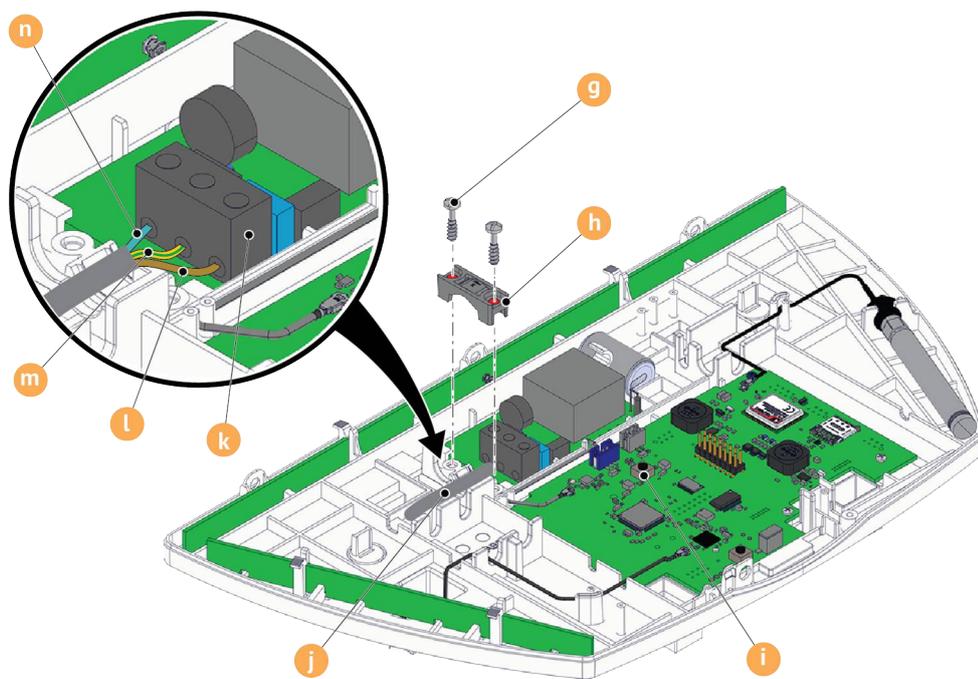
1. Using the housing drilling template , drill four $\varnothing 6 \times 30$ mm holes.



2. Pass the power cable **b** through the hole **c**.

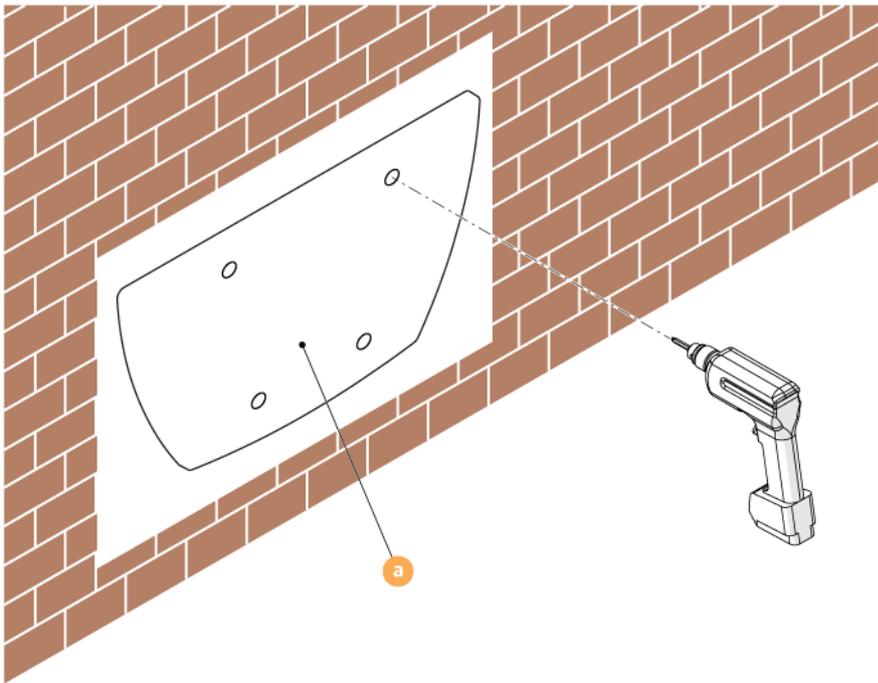


3. Insert the plugs **d** in the holes.
4. Fix the battery pack **e** using four screws **f**.

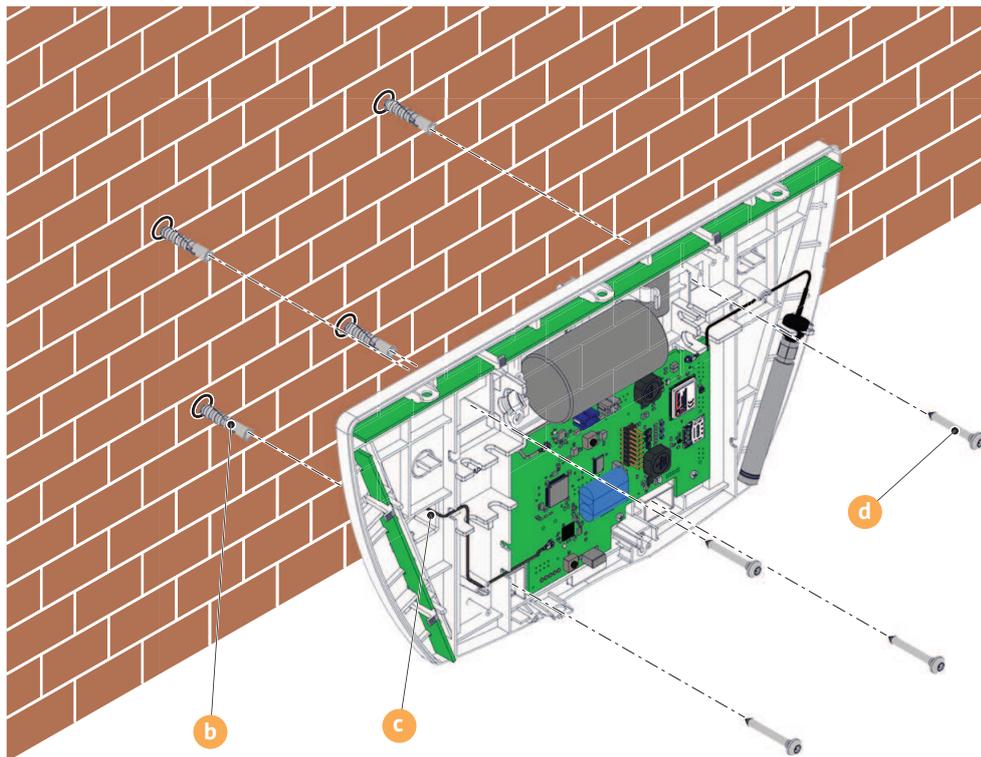


5. Remove the two fixing screws **g** and the cable tie **h**.
6. Using the clamping screw **k**, fix the ground **m**, phase **l** and neutral **n** cables.
7. Fix the power cable **j** with the cable tie **h** and its screws **g**.
8. Power up the Superlink C.
9. Press the **Reset** button **i**.

5.3.2. Battery model

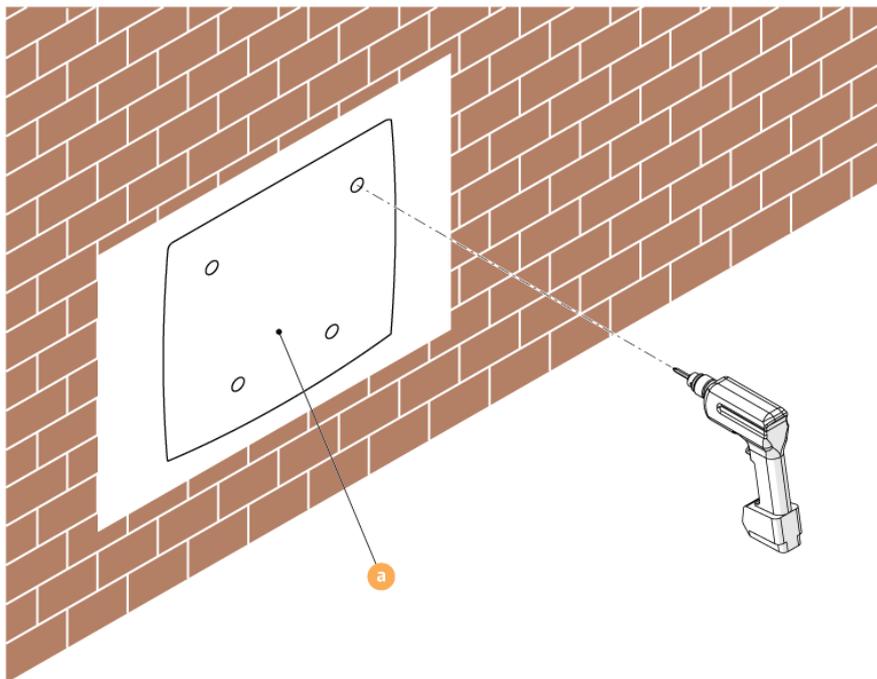


1. Using the housing drilling template **a**, drill four $\varnothing 6 \times 30$ mm holes.

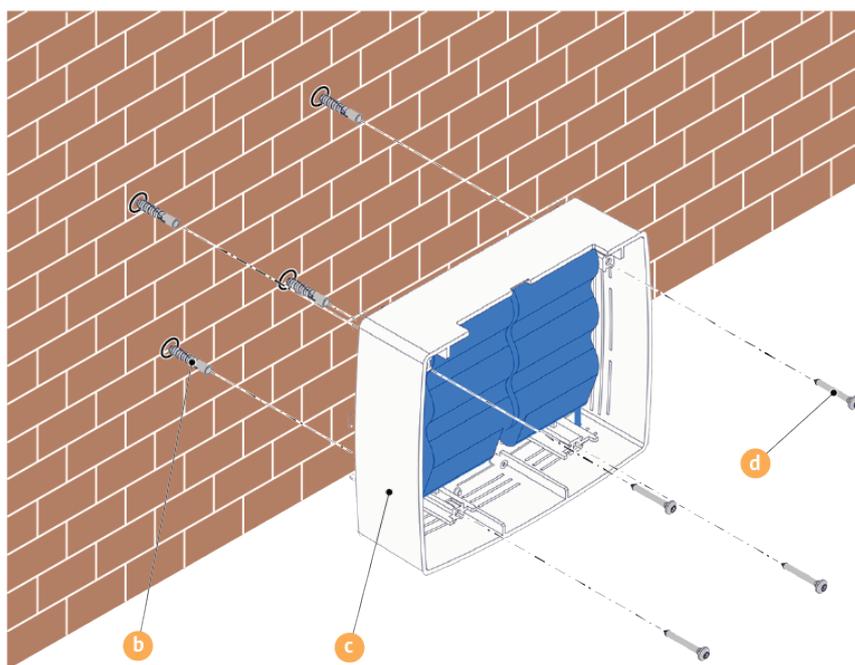


2. Insert the plugs **b** in the holes.
3. Fix the battery pack **c** using four screws **d**.

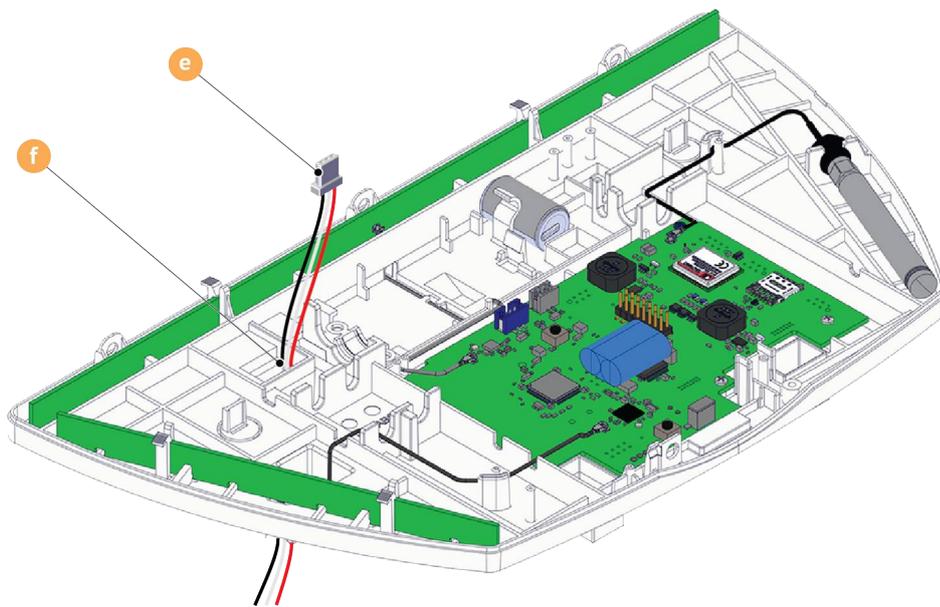
5.3.3. Battery pack model



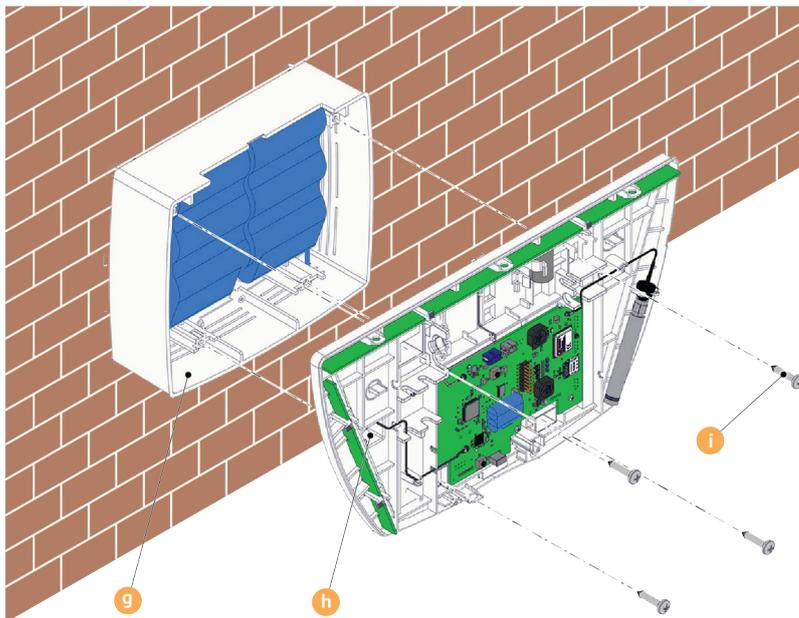
1. Using the battery pack drilling template **a**, drill four $\varnothing 6 \times 30$ mm holes.



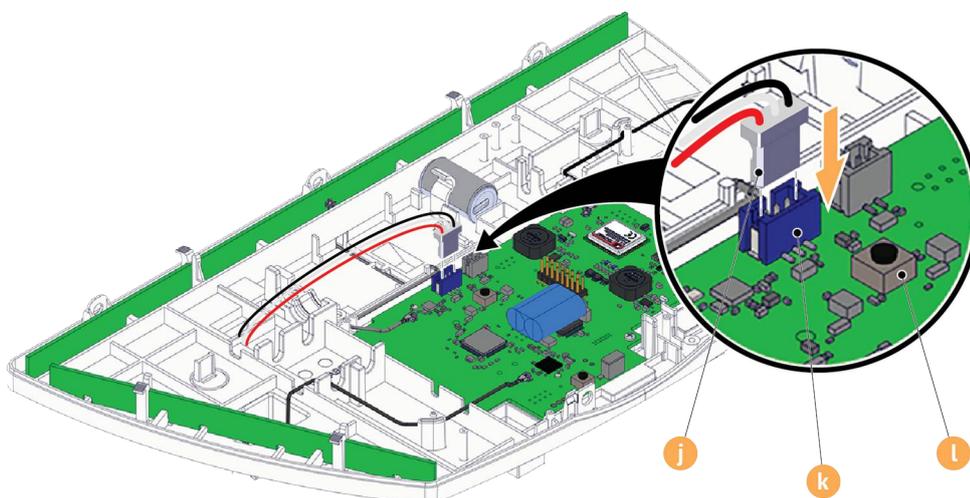
2. Insert the plugs **b** in the holes.
3. Fix the battery pack **c** using four screws **d**.



4. Pass the power cable **e** through the hole **f**.



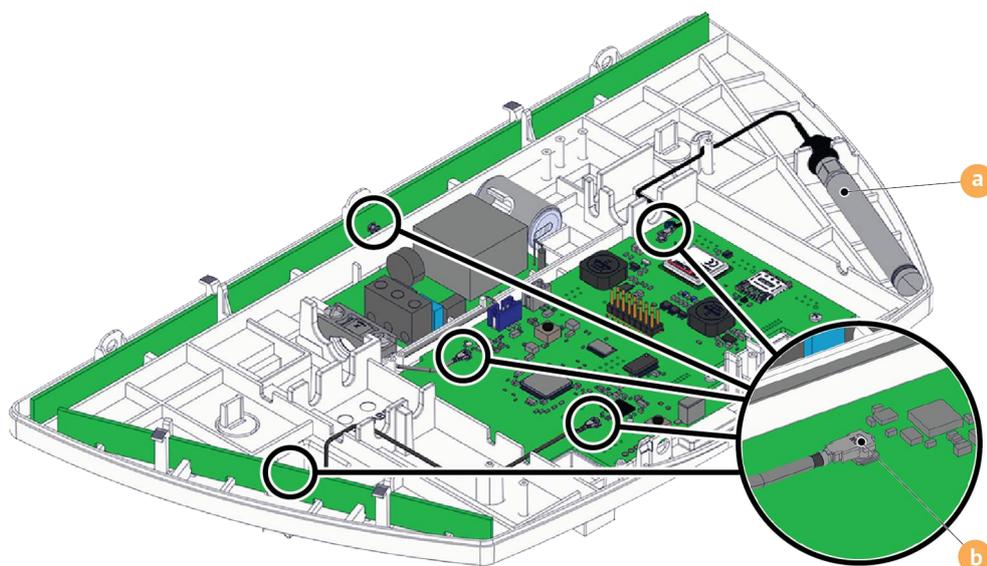
5. Fix the housing **h** on the battery pack **g** using four screws **i**.



- Put the plug **j** in the connector **k**.
- Press the **Reset** button **l**.

5.4. Before closing

5.4.1. Antenna connectors



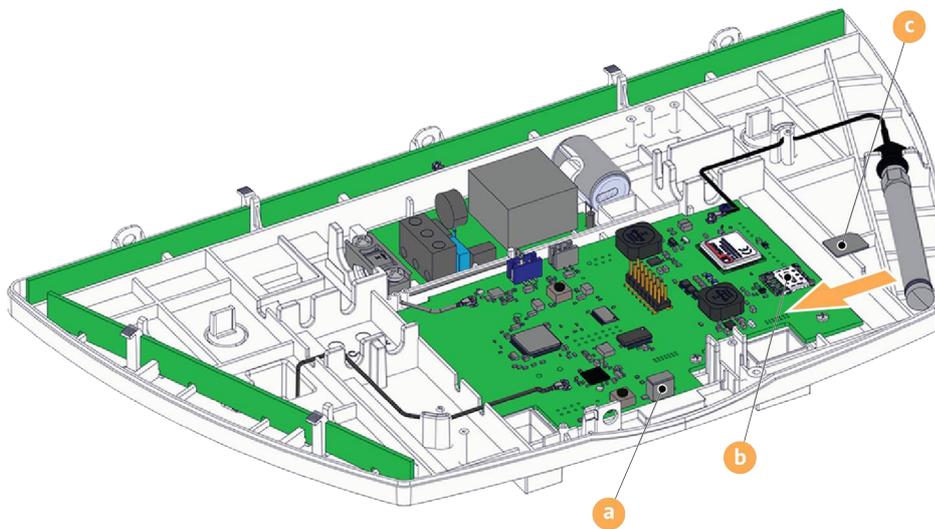
- Check that NB-IoT antenna is properly **a** tighten.
- Check that all five antenna connectors **b** are properly connected.

5.4.2. SIM card

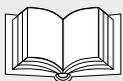


Superlink C can be delivered with or without SIM card.

This has been specified in the purchase order.



1. Insert, as shown, the SIM card **c** in its slot **b**.
2. Connect a computer to USB port (mini A) **a**.
3. Use **Superprog** to configure the **NB-IoT** communication.

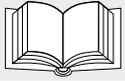


Refer to Superprog documentation.

4. Unplug the USB cable after configuration.

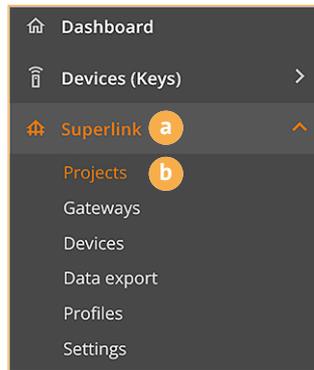
5.4.3. Superlink C first start-up

- ✓ Superlink C is installed and connected with Sonexa Platform.
- ✓ All the devices are installed.
- 1. Get connected to Sonexa Platform.



Refer to Sonexa Platform documentation.

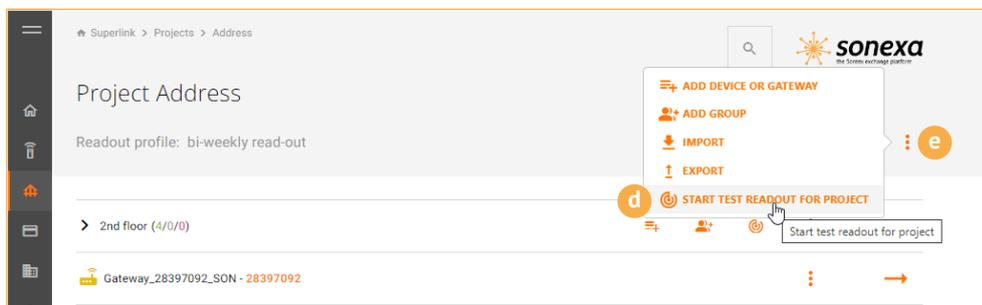
- 2. Open constant communication with all the devices.
 - See [Put in commissioning mode ▶ 18].



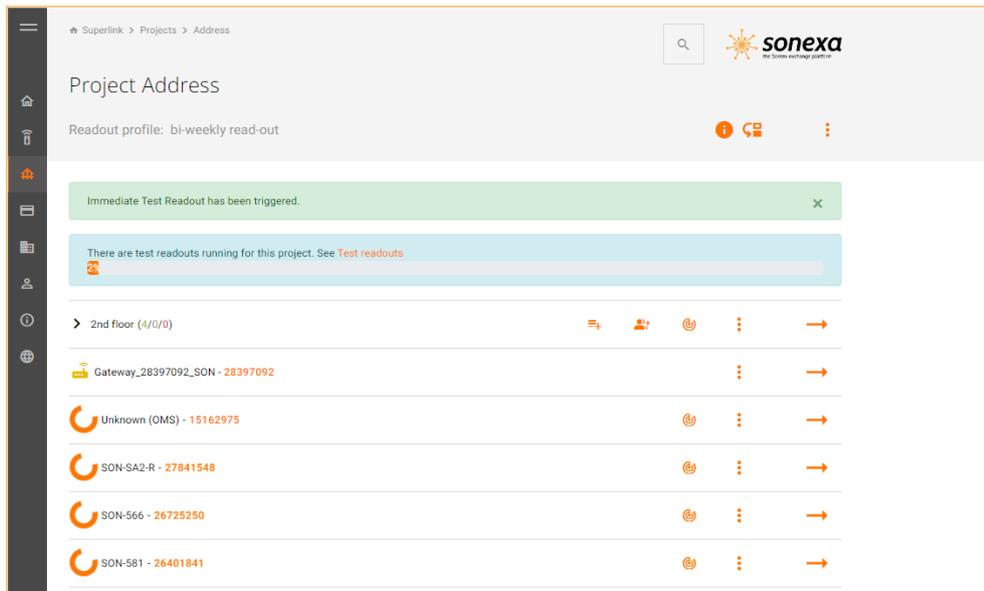
- 3. Go to **Superlink** menu **a**, then to **Projects** **b** tab.

NAME	READOUT PROFILE	NEXT READOUT	GATEWA...	DEVI...
Address	Biweekly readout	01.07.2022	1	
RédaTech	Biweekly readout	01.07.2022	0	

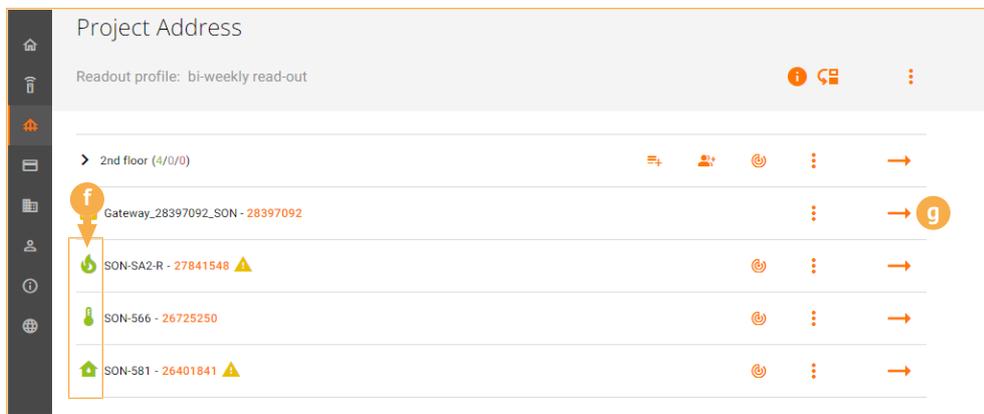
- 4. Click on the project to test in the list **c**.



- 5. Click on the **:** button **e**.
 - A popup window is displayed.
- 6. Click on **START TEST READOUT FOR PROJECT** **d** to start the test readout for the project.

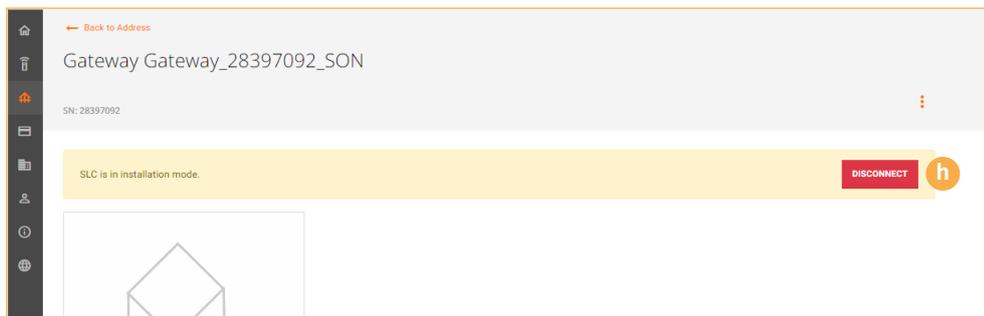


→ Superlink C is connecting with all the installed devices.



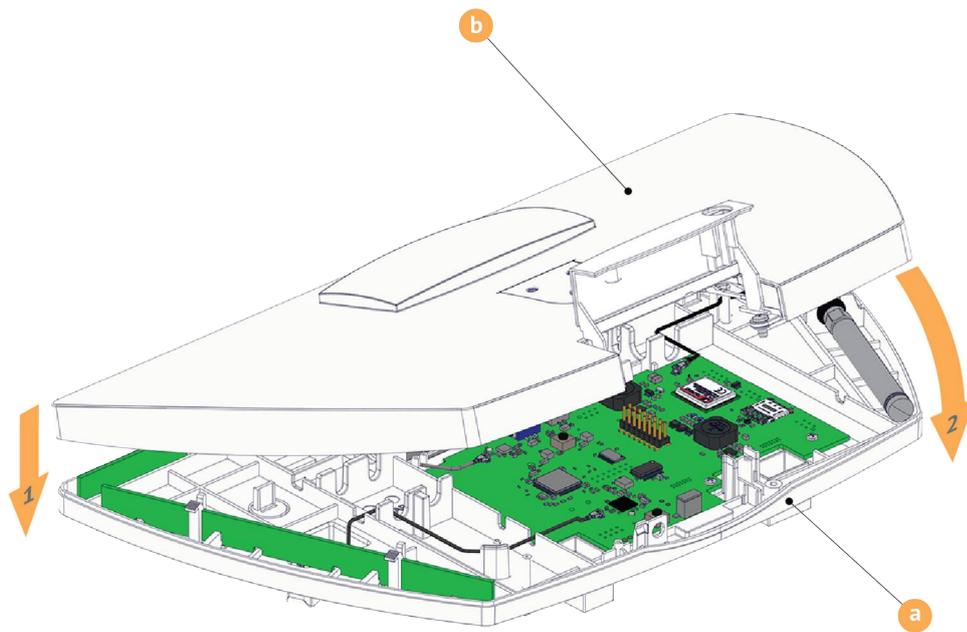
→ When the test readout is finished, all device icons connected to the Superlink C are displayed in green **f**.

7. Click on → **g** to display the Gateway details.

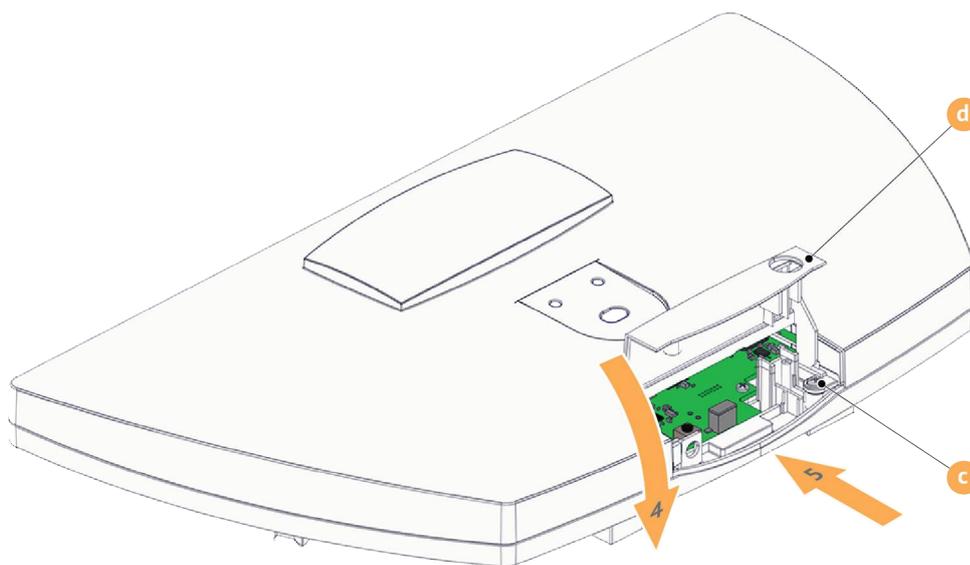


8. Click on **DISCONNECT** **h** to close constant communication with the gateway.

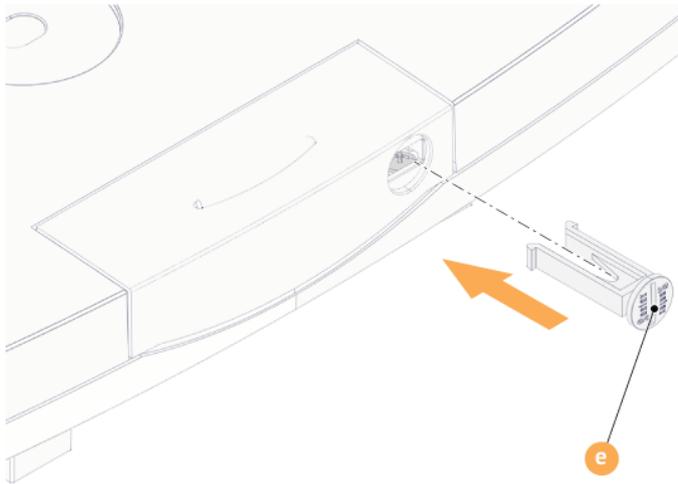
5.5. Closing Superlink C



1. Place the upper-case cover **b** on the housing **a**.
2. Close the upper-case cover **b**.



3. Tighten the screw **c**.
4. Close the lid **d**.
5. Push the lid **d**.



6. Insert the security seal **e** all the way in until it clicks into place.

5.6. Remote antenna

All Superlink C antennas can be replaced by remote antennas.

DANGER



Electrical current

Risk of electrocution

Conductive part outside the housing is not allowed.



The remote antennas used must have the same technical characteristics as the Superlink C antennas.

See [Radio communication ▶ 23].

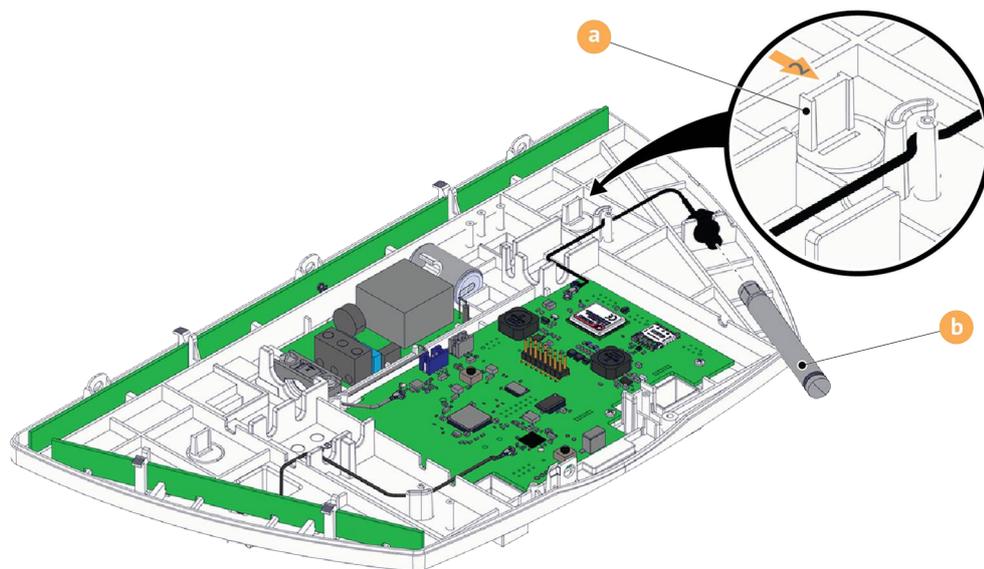


Sontex provides all optional fittings and remote antennas.

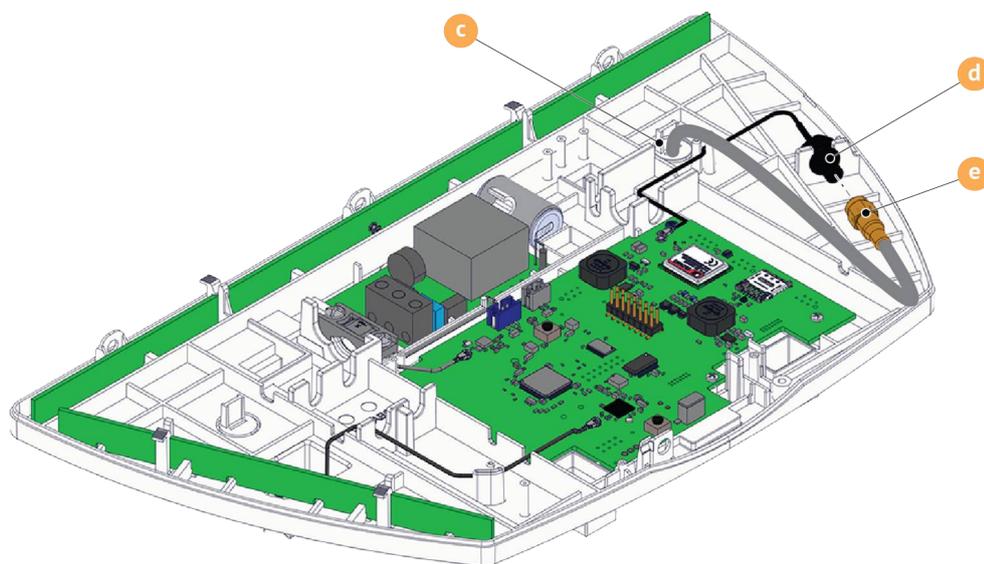
Contact [Support ▶ 5] for more information.

5.6.1. NB-IoT, LTE-M antenna

- ✓ Upper-case cover removed.
See [Upper-case cover removal ▶ 27].



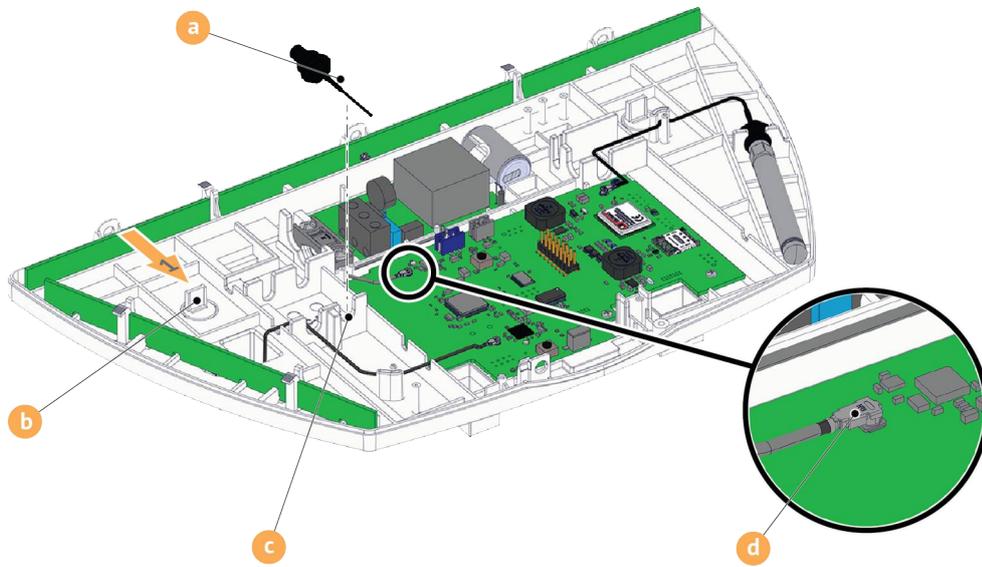
1. Unscrew and remove the Superlink C NB-IoT antenna **b**.
2. Pull the lever **a** to open the passage hole.



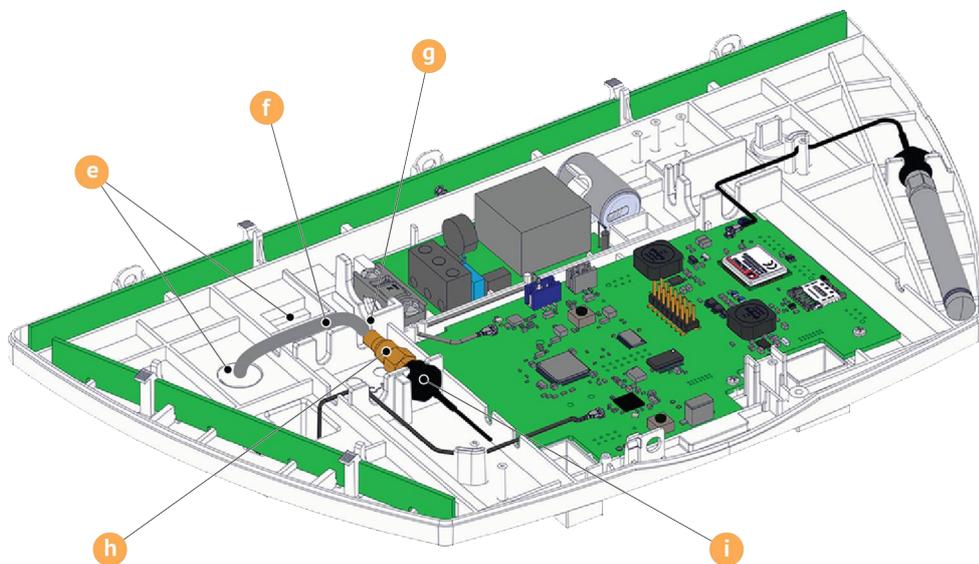
3. Pass the remote antenna cable through the passage hole **c**.
4. Screw the remote antenna **e** to the Superlink C connector **d**.

5.6.2. Sontex radio antenna

- ✓ Upper-case cover removed.
See [Upper-case cover removal ▶ 27].



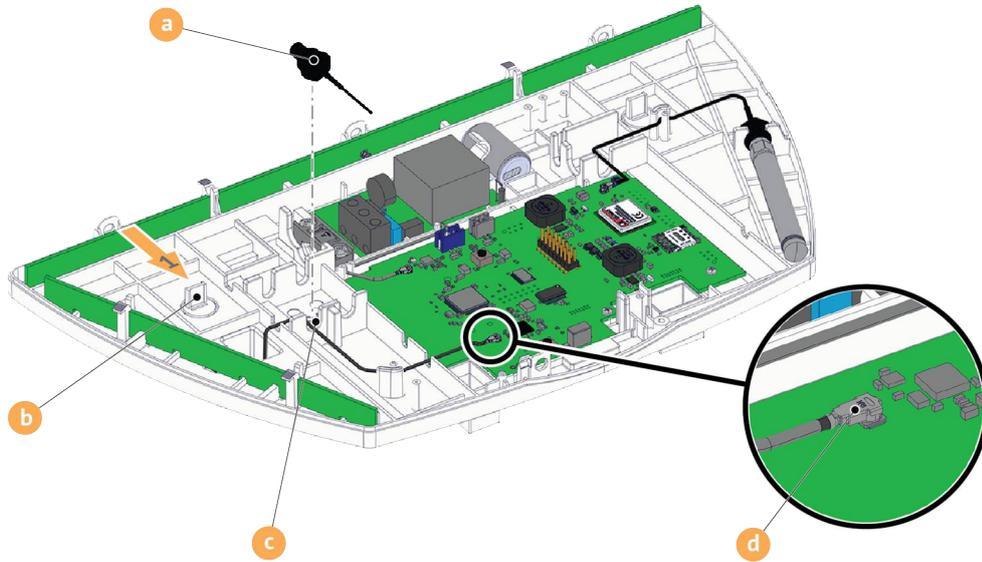
1. If necessary, pull the lever **b** to open the passage hole.
2. Fix, by screwing the nut, the Sontex radio antenna connector **a** into its housing **c**.
3. Replace the radio antenna plug **d** with the connector plug.



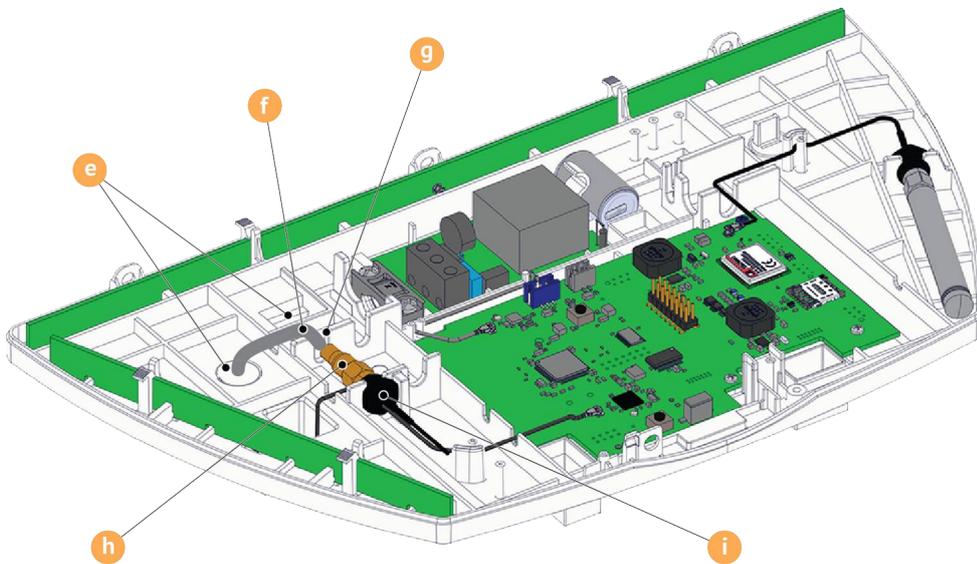
4. Pass the remote antenna cable **f** through one of the passage holes **e**.
5. Screw the remote antenna **h** to the connector **i**.
→ Remote antenna kit part number: SLCX0005.
6. Make sur the antenna cable **f** passes through the cable guide **g**.

5.6.3. wM-Bus / OMS antenna

- ✓ Upper-case cover removed.
See [Upper-case cover removal ▶ 27].



1. If necessary, pull the lever **b** to open the passage hole.
2. Fix, by screwing the nut, the Sontex radio antenna connector **a** into its housing **c**.
3. Replace the radio antenna plug **d** with the connector plug.



4. Pass the remote antenna cable **f** through one of the passage holes **e**.
5. Screw the remote antenna **h** to the connector **i**.
→ Remote antenna kit part number: SLCX0005.
6. Make sur the antenna cable **f** passes through the cable guide **g**.

6. Maintenance



After every battery change, update the last battery change date in the firmware using Sonexa Platform or Superprog!



Refer to Sonexa Platform documentation.



In case of problems during firmware update using Sonexa Platform, connect a computer using the Superlink C USB port and use Superprog to resolve.



Refer to Superprog documentation.

6.1. Battery change

Notice



Discharged backup battery

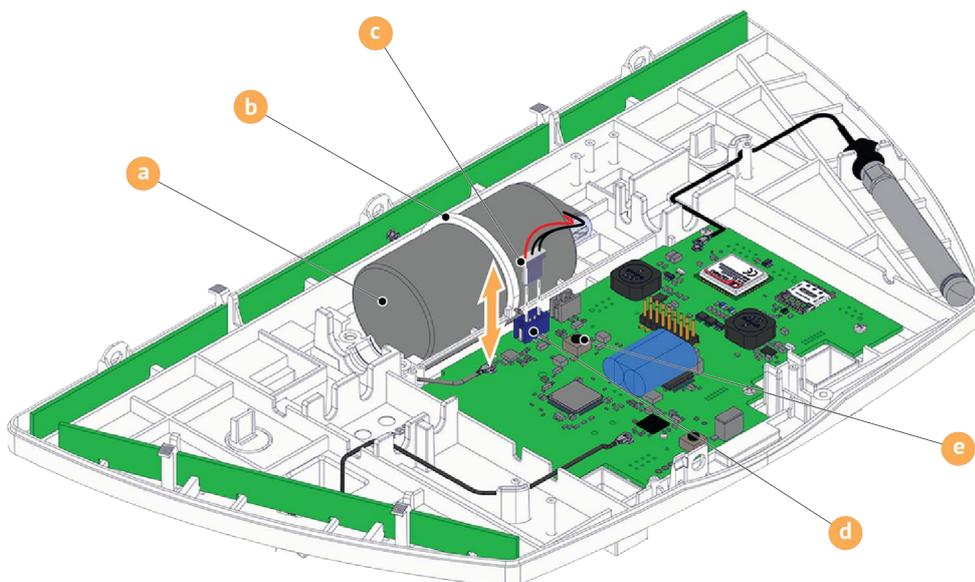
Total loss of configuration

1. Plan to change the battery before the backup battery is completely discharged, otherwise you will have to reinstall the Superlink C completely.



Sonexa Platform informs you when the battery must be changed.

1. Remove the upper-case cover.
→ See [Opening Superlink C ▶ 26].



2. Remove the battery connector **c**.
3. Cut the Hellermann Tyton **b**.

4. Change the battery **a**.
5. Fix the new battery **a** with a new Hellermann Tyton **b**.
6. Connect the battery **a** to the board **d**.
7. Press the **Reset** button **e**.
8. Close the upper-case cover.
 - See [Closing Superlink C ▶ 38].

6.2. Battery pack change

Notice



Discharged backup battery

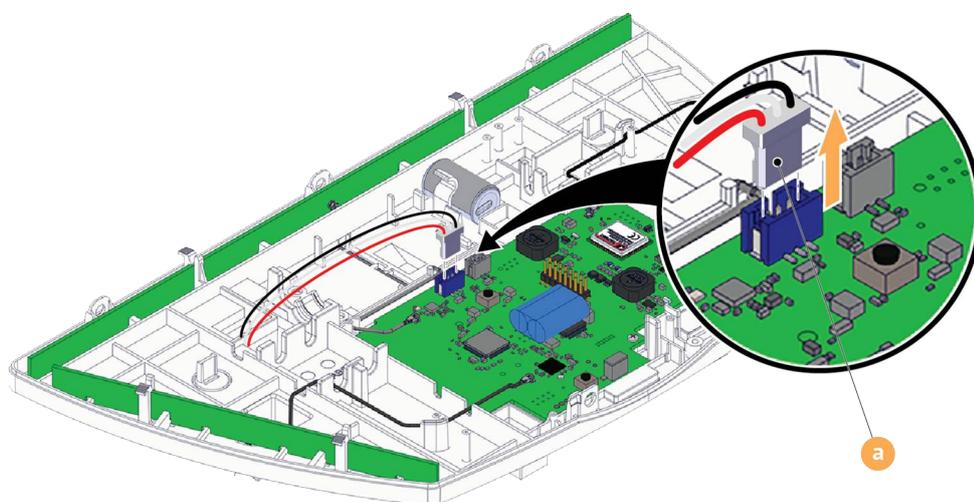
Total loss of configuration

1. Plan to change the battery pack before the backup battery is completely discharged, otherwise you will have to reinstall the Superlink C completely.

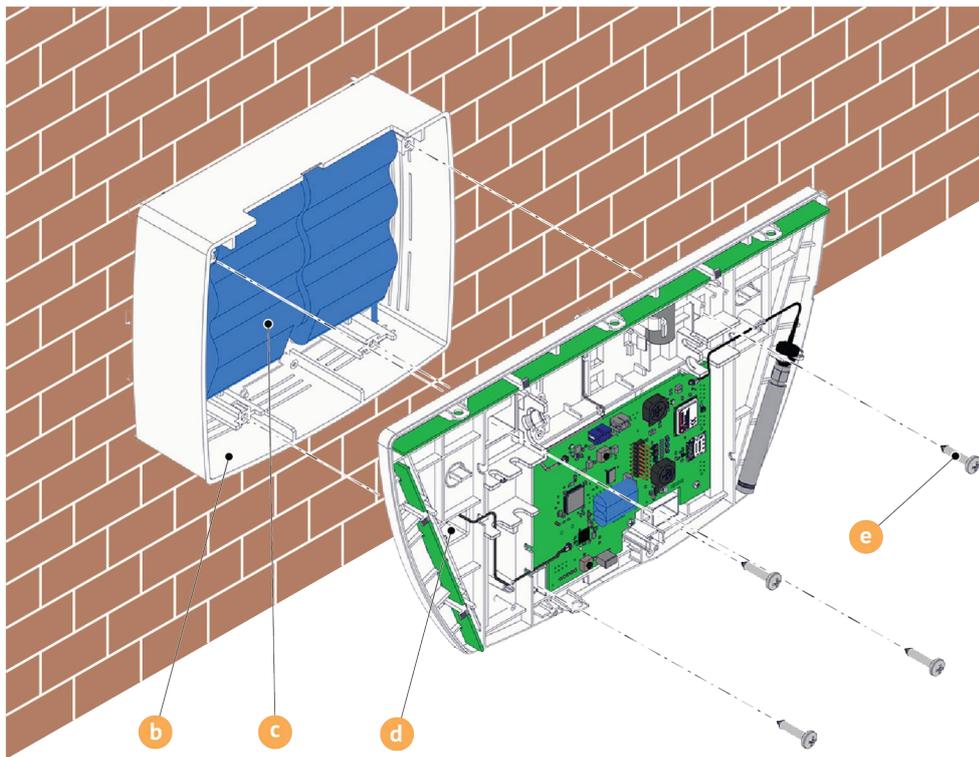


Sonexa Platform informs you when the battery pack must be changed.

1. Remove the upper-case cover.
 - See [Opening Superlink C ▶ 26].



2. Remove the battery pack connector **a**.



3. Remove the screws **e**.
4. Remove the Superlink C **d** from the battery pack **b**.
5. Change the battery(ies) pack **c**.
6. See [Battery pack model ▶ 32] to remount.

6.3. Backup battery change

Notice



Discharged battery or battery pack

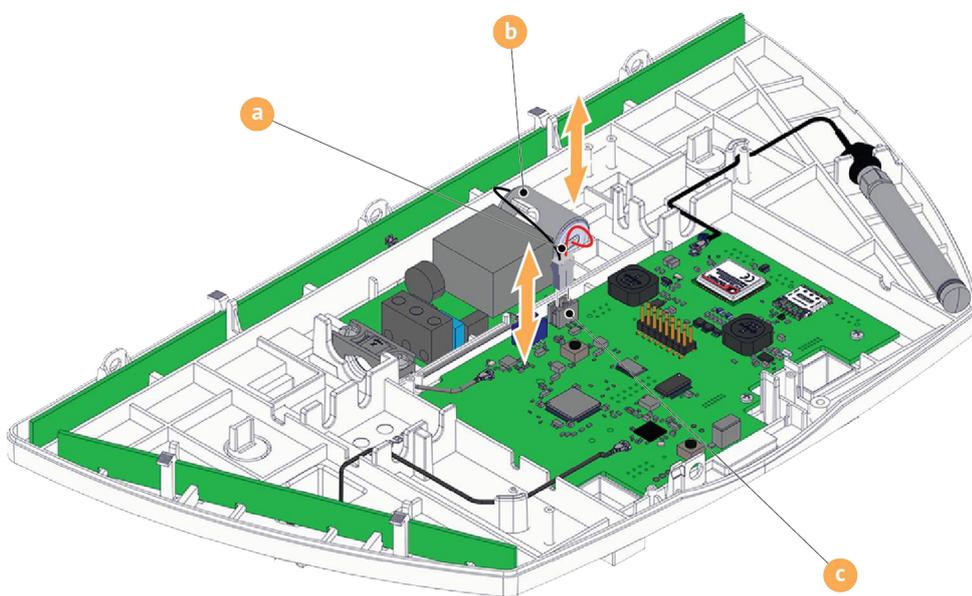
Total loss of configuration

1. Plan to change the backup battery while the battery or battery pack has still some charge, otherwise you will have to reinstall the Superlink C completely.



Sontex recommends to change the backup battery maximum every ten years.

1. Remove the upper-case cover.
→ See [Opening Superlink C ▶ 26].



2. Remove the battery connector **a**.
3. Unclip the backup battery **b**.
4. Clip the new backup battery **b**.
5. Connect the backup battery to the board **c**.
6. Close the upper-case cover.
→ See [Closing Superlink C ▶ 38].

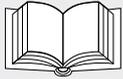
6.4. Firmware update



The firmware is done through Sonexa Platform.



Refer to Sonexa Platform documentation.

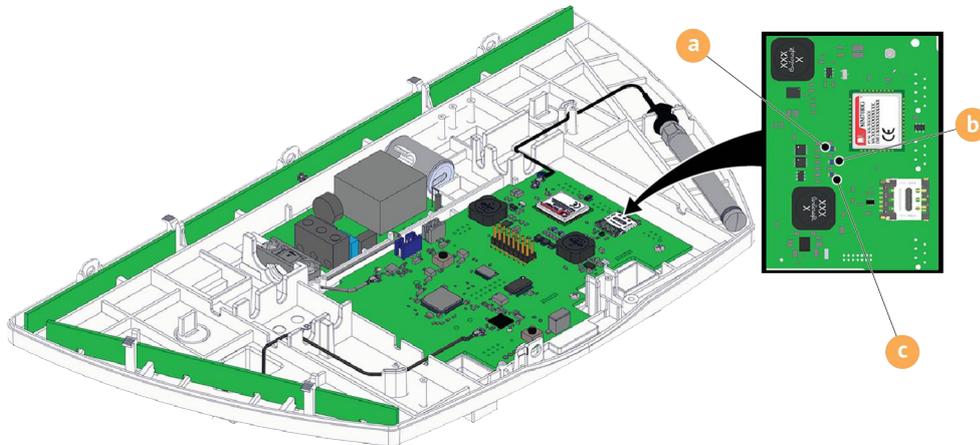


Refer to Superprog documentation.

PAGE INTENTIONALLY LEFT BLANK

7. Troubleshooting

7.1. NB-IoT LEDs status



Network status indication **a** (green)

Status	Description
Off	Not powered
Slow blinking	Not registered
Fast blinking	Data transmits

Sonexa Platform connection status **b** (green)

Status	Description
Off	Not connected
On Connection established	Stays lighted

NB-IoT module status **c** (red)

Status	Description
Off	Low power
On Connection established	Active

