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products!

SENEK



SENEK.Home Li

User Manual

Valid for:	SENEK.Home Li
Series number:	AU-V2-xxLI10-xxxxx
Valid in:	Australia
Document version:	1.1
Publication date:	22 March 2019
Document number:	TD140-038.11

Please read these documents carefully and observe the safety instructions!

Original in German

Impressum

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Change history

Document version	Amendments	Valid from
1.0	Initial version	04 May 2018
1.1	Impressum changed; Short-circuit current in chapter. 3.3 "Technical Data" changed	22 March 2019

1 Basic information

This User Manual provides all information that is required for the intended use and operation of the unit. Along with the basic information you will find information on safety, a product overview, an operating instruction as well as information on the maintenance of the SENECHome Li and a glossary.

Please read this information carefully!

1.1 Target group of this instruction

This user manual is addressed to the end user. Only the end user may put the unit into service and use the functions as described in this user manual. Self-installation and modifications to the system by the end user (provided he is not an electrician) are expressly prohibited.

1.2 Exclusion of liability/guarantees

In the event of a faulty installation or incorrect operation and use not as intended, hazards can arise for life and limb of the user or third parties or damage may be caused to the installation or other assets. Setting up, installation, commissioning

and maintenance as well as the use of the SENECHome Li cannot be monitored by the manufacturer. For this reason, SENECHome Li accepts no responsibility or liability for any damage, costs and losses arising as a result of the incorrect installation, incorrect operation or use not as intended. The same applies in case of damages caused by force majeure (e.g. storm, overvoltage, lightning or fire)

The use or operation of the SENECHome Li and its (additional) functional scope is always the responsibility of the end customer. Likewise, SENECHome Li accepts no liability for infringements of patent law or of third party rights arising from the non-intended use of the components.

The delivery and purchase conditions of SENECHome Li shall be applicable. For detailed information, please access the documents available at mein-senec.de.

1.3 Validity and storage

This user manual is valid for all Australian SENECHome Li equipment (from January 2018).

Always keep this document at hand nearby the SENECHome Li, in order to have easy access to the information, if required.


1.4 User guidance

Any measures against risk of serious personal injury or material damage or any additional information shall be listed in the respective safety instructions in this user manual. They are directly stated before an action sequence or a description is provided jointly with the action.

All measures described in this manual must be followed in order to prevent dangers!





1.4.1 Layout of safety instructions

The safety instructions have the following layout:

	<p>Type and source of danger!</p> <p>Consequences when the instructions are not followed</p> <p>➤ Measure to avoid danger.</p>
---	---

1.4.2 Gradation of safety instructions

The warning instructions vary according to the type of danger:

Signal word panel	Kind of danger
	Warns against an imminent threat of danger, which will lead to death or serious injuries if not avoided.
	Warns against a possibly dangerous situation which will lead to death or serious injuries if not avoided.
	Warns against a possibly dangerous situation which will lead to minor or moderate injury if not avoided.
	Warns against a possibly dangerous situation which will lead to damages to property or the environment, if not avoided.

1.4.3 Handling Instructions

Handling instructions urge you to perform an action or a workstep. Always perform the handling instructions individually and in the sequence as provided. Handling instructions are construed as follows:

1. Guidance concerning an action
Indication of result (if required)

1.5 Product identification

For any questions, please submit the serial number to SENEK. It is found on the identification plate of the SENEK.Home Li.

SENEK.Home V2 Li 2.5/5.0/7.5/10.0		SENEK	
U _{AC}	3 x 230 V AC nom.	Serial number:	
U _{DC}	48 V (39 V - 52.3 V)		
I _{AC}	3 x 16 A	Installation company:	
I _{DC}	55 A		
C _g at 30 °C	56.7 Ah p. module	Address:	
f	50 Hz		
T _{min} - T _{max}	5 °C - 40 °C	Name of installer:	
P _{max}	1 x 3680 W		
S _{max}	1 x 3680 VA	Date of installation:	
P _{Backup power}	1000 W	Labeling of the circuit breaker at the premises main switchboard:	
Power factor	0.8 _{reg} - 0.8 _{sup}		
Ingress protection	IP30	Circuit breaker size:	
Protection class	I		
Pollution degree	2		
Battery type	Lithium-manganese-cobalt-oxide		
Inverter topology	Isolated by transformer		
Year of manufacture	2019		
SENEK GmbH Wittenberger Straße 15 04129 Leipzig Germany Tel.: +49 341 87057-0 Mail: service@senec.com			

Fig. 1 Type plate with series number

The type plate of the SENEK.Home Li is located at the left external side of the unit and is affixed by the installer for recording the data. It contains the most important safety instructions as well as brief information regarding conformity and technology.

Also, contact information of SENEK is provided.

1.6 Changes

Changes to the SENEK.Home Li are expressly prohibited, unless SENEK has authorized such changes in writing.

2 Safety

The following safety instructions must be observed without fail to avoid injury or damage and to guarantee the long-term and safe operation of the SENECHome Li.

2.1 Intended use

The SENECHome Li-storage unit and its components have been developed and designed in accordance with the recognized norms and legal regulations. The SENECHome Li operates as a charge control and inverter from direct current to alternating current and inversely. The battery modules store the electric power that is generated from a power generation plant (photovoltaics/combined heat and power plant/small wind turbine). If required, the stored energy is supplied to the domestic power network in the form of electricity.

2.2 Use not as intended

The use of the SENECHome Li on or in the water (e.g. boats, ships, offshore installations), in the air or for mobile uses is expressly prohibited. Modifications which are not expressly authorised by SENECHome Li in writing, are not permitted. Warranty and guarantee terms are voided by conversions or modifications performed without permission.

The use of third-party rechargeable batteries is not permitted.

The SENECHome Li does not have an uninterrupted power supply and thus must not be used for the operation of medical equipment.

The SENECHome Li must only be operated in parallel with the mains and does not permit stand-alone operation. Backup power is available to enable the use of electric power in case of a power shutdown. Note that in case you use the optional power emergency pack, there are extra costs for the additional package, additional material and installation.

2.3 Requirements on the end user

Improper operation may lead to physical hazard to yourself or to third parties. This may also cause damages to the system. As an end user, you should meet the following requirements:

- Only operate the SENECHome Li as described in this user manual.
- The operation of the SENECHome Li by persons with a limited mental capacity is prohibited.
- Children may not use the SENECHome Li.
- The SENECHome Li may not be opened by the end user, unless he is an electrician.
- All repairs may only be performed by service engineers with SENECHome Li certification.

2.4 General safety instructions

Please read the following safety instructions carefully to prevent injury and damage, so that the long-term and safe operation of the SENE.Home Li is guaranteed.



Hazard due to improper use!

Only use the SENE.Home Li according to its intended use.

- Only use the system in original condition, without arbitrary modifications and in a technically flawless condition.



Danger to life from electric shock!

Touching of live parts inside the SENE.Home Li may lead to fatal injuries due to electric shock.

- Do not remove the covers.
- Do not touch the components.
- Never reach beneath covers.



Hazard of injuries and burning injuries due to escape of electrolyte!

The battery modules in the system are protected by an integrated battery management system to ensure safe operation. In spite of the careful design, the battery cells inside the battery module may corrode or suffer thermal damages due to mechanical failure.

Possible:

- Excessive heat development on the surface of the battery cells
 - Escape of electrolyte
 - Escaping electrolyte may ignite and cause a fire
 - The smoke of fire may cause irritation to the skin, eyes and neck
- Only operate the system at a temperature between 5 °C and 40 °C.
 - Do not access the room in case of leaking fluids or gases. Never touch the electrolyte. Contact the fire brigade







NOTICE

Instruction!

The SENE.Home Li has a ventilation outlet on the front cover and at the top side, allowing convection. Components may be damaged if the ventilation outlets are covered.

- Do not place any objects on top of the ventilation outlets
- Do not cover the ventilation outlets
- Keep a minimum distance of 100 mm above the SENE.Home Li storage unit

2.5 Safety symbols on the identification plate

Symbol	Meaning
	Observe the operating instructions!
	Earth prior to use!
	Warning against hazards due to the leakage of batteries!
	Warning against electric voltage!
	Warning against explosive materials!
	Products with this label must not be disposed of in the domestic waste!

3 Product description

3.1 Overview

3.1.1 Product overview

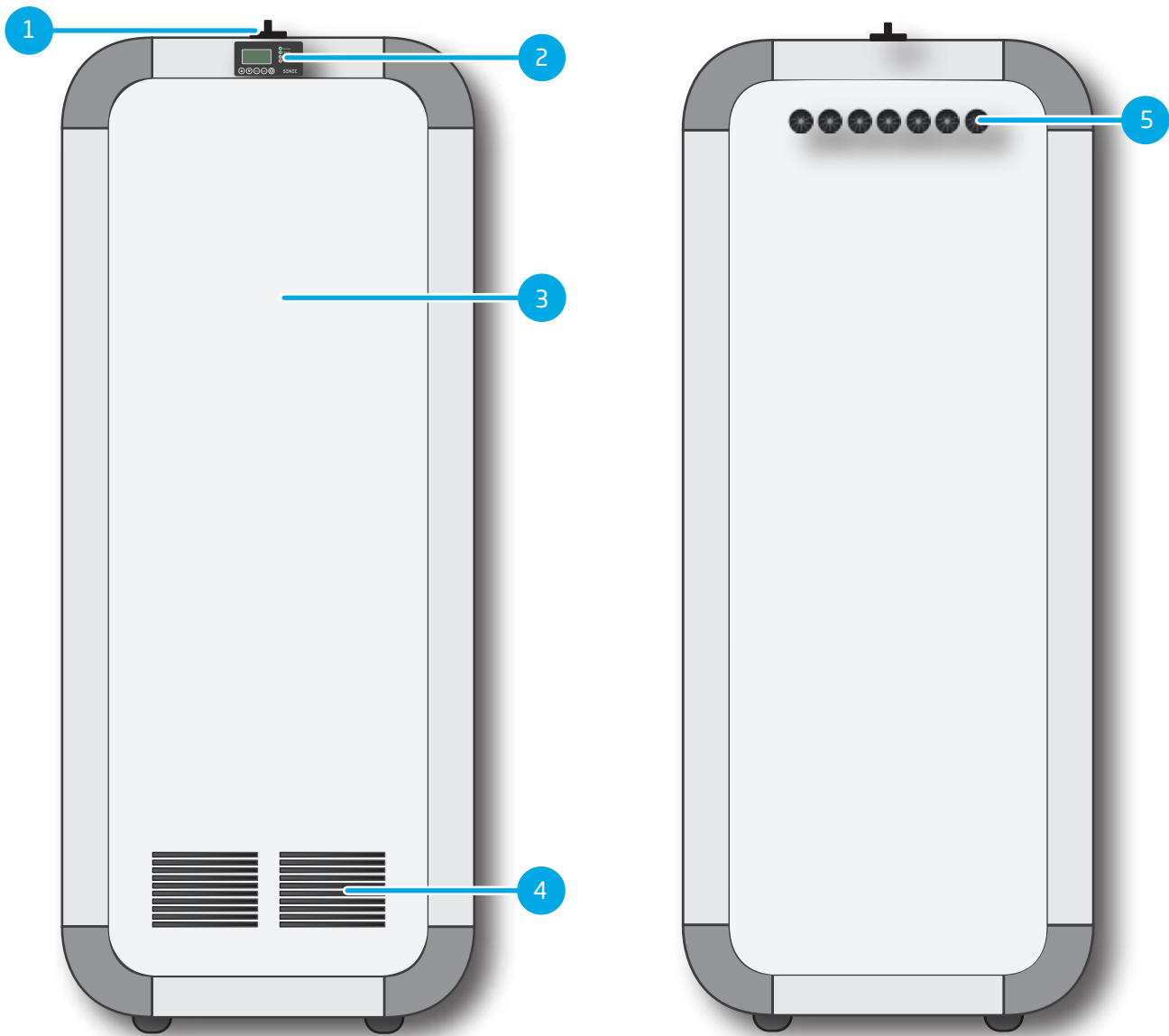
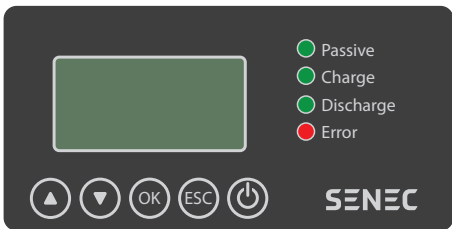



Fig. 2 Product view, SENECHome Li, front view (left) and rear view (right)

- 1 DC isolating switch
- 2 Display
- 3 Front cover
- 4 Ventilation outlet in front cover
- 5 Rear cable bushings

3.1.2 Control elements and indicators

Element	Designation	Description
	Display	<p>The display shows you the status messages and operating modes. The display is located on the front side of the SENECHome Li, at the top.</p> <p>A description of the viewed contents is found in Chapter 4.4 Reading status indicators on the front display, page 18.</p>
	DC isolating switch	<p>The DC isolating switch disconnects the battery module from the SENECHome Li (battery inverter). The battery is connected to the system when the switch is in the "ON" position. When the switch is in the OFF position, the battery is isolated from the system and is being neither charged nor discharged.</p> <p>CAUTION: After disconnecting the DC isolating switch, wait at least 60 seconds before reconnection!</p>

NOTICE

Instruction!

The DC isolating switch is not a main switch. After disconnecting the DC power, the lithium modules continue their operation. An emergency charge is not allowed. This may lead to the deep discharge of the module.

- For the complete disconnection from the power supply, disconnect the battery module via the "Switch-off" function (see Chapter 4.1.2 Front display operation, page 17) and the B 16 A domestic fuse.

NOTICE

Instruction!

- Do not use the DC isolating switch for restarting the SENECHome Li.

3.2 Function description

Storage of current from power generation systems

When the SENE.Home Li is connected to the power generation system, electric power is supplied to the battery modules. Prerequisite is that the generator unit feeds the grid-conformant alternating current to the domestic power network. It can be either be used directly in the domestic power network or stored temporarily in the battery modules. If required, the system supplies the stored power to the domestic grid.

Controlling the energy flow

The electronic system controls primarily the energy flow into and out of the SENE.Home Li. Additionally, the charge control adjusts the energy flow in the first line, based on the measuring values at the grid feed point.

Converting direct current to alternating current

The SENE.Inverter (integrated batter inverter) converts the alternating current supplied by the power generator plant into direct current. It is then stored in the battery modules. Electricity drawn from the system to supply the domestic power network is converted back into alternating current and fed to the domestic grid.

Charge electronics

The control of the charging and discharging process is preconfigured in the system. It consists of a transformer, control unit (MCU), fuses, grid and system protection devices (automatic disconnection devices) and a measuring unit.

The control communicates with the SENE.Inverter and performs the parameter settings. The power meter measures and displays three-phase currents and voltages in both directions in the AC grid. This enables the measurement of electricity flows between the battery modules, power generation system and the domestic users. Also the charging and discharging of the battery module are controlled.

Battery modules

According to the configuration, the SENE.Home Li is equipped with a (SENE.Home Li 2.5), two (SENE.Home Li 5.0), three (SENE.Home Li 7.5) or four (SENE.Home Li 10.0) battery modules. The battery modules store the supplied energy and release it again. Each battery has an integrated battery management system which continuously monitors monitors the safety parameters for the module (temperature, current and voltage) to ensure smooth operation. It is able to shut down battery charging or discharging in exceptional situations, independently of the software controlling the complete system.

3.3 Technical data

	SENEC.Home Li 2.5	SENEC.Home Li 5.0	SENEC.Home Li 7.5	SENEC.Home Li 10.0
Technical data system				
max. charge power (AC)	625 W	1,250 W	1,875 W	2,500 W
max. discharge power (AC)	1,250 W	2,250 W	2,250 W	2,250 W
Usable storage capacity (kWh*/Ah)	up to 2.5 kWh/ 53.42 Ah	up to 5.0 kWh/ 106.84 Ah	up to 7.5 kWh/ 160.26 Ah	up to 10.0 kWh/ 213.68 Ah
Overall system dimensions (W/H/D)	530 mm/1,125 mm/406 mm			
Overall system weight	approx. 77 kg	approx. 102 kg	approx. 127 kg	approx. 152 kg
System weight without battery	approx. 50 kg			
Display size (W/H)	65 mm/35 mm			
Mains backup operation	yes, optional			
Built-in VPN router	yes			
Operating modes	Mains operation, mains backup operation (optional), standby, Off			
Communication with SENE C. Inverter	via RS-485-Bus			
Measuring sensors	63 A power meter			
Self-consumption	24 W			
SENEC.Cloud compatible	yes			
Daisy-chaining possible	yes, up to 4 systems (1 master + 3 slaves)			
Data storage	30 years			
Free monitoring	yes			
Fault monitoring/fault log	yes, via remote monitoring			
Automatic updates	yes			
PV inverter control	Dynamic control of all certified PV inverters			
Connection to the grid	AC			
Fan switch-on temperature	40 °C			
Compatible with grid type	TN/TN - C/TN - S/TT grids			
Protection class	IP30			
Operating temperature	5° C to + 40° C			
Relative humidity	10 - 85 % (non-condensing)			
Minimum distances	300 mm to the sides, 100 mm above, 100 mm to the rear panel			

Battery/battery module

Battery technology	Lithium ion (lithium-manganese-cobalt-oxide)			
Rated voltage	48 V			
Input voltage (min. - max.)	51.7 - 52.3 V			
Output voltage (min. - max.)	39 - 52 V			
Charging current	12 A per battery module			
Gross storage capacity**	2.5 kWh	5.0 kWh	7.5 kWh	10.0 kWh
Battery service life**	designed for up to 20 years			
Battery module dimensions (W/H/D)	440 mm x 84 mm x 450 mm			
Battery module weight	25 kg			
Overtemperature protection	Automatic power regulation by integrated battery management system			
Deep discharge protection	by an integrated battery management system			
Battery protection	Automatic full charge from the mains if insufficient charging current from PV/CHP/wind power			
Short-circuit current of emergency power output in mains backup operation	20 A			
High voltage category	III			
Contamination level	2			

Battery inverter

Type	SENEC.Inverter
Weight	max. 27 kg
Max. efficiency	up to 93 %
Power factor $\cos \varphi$	$0,8_{ind} - 0,8_{cap}$
Number of phases	3-phase measurement 1-phase power output 3-phase compensation
Output frequency	50 Hz
Connection value	70 W
Disconnection value	40 W
Load threshold	40 W

* with constant current of 10 A and voltage from 39 V at 25 °C

** depending on temperature and usage behaviour

4 Use of control elements and indicators

4.1 Front display control

4.1.1 Front display indicator

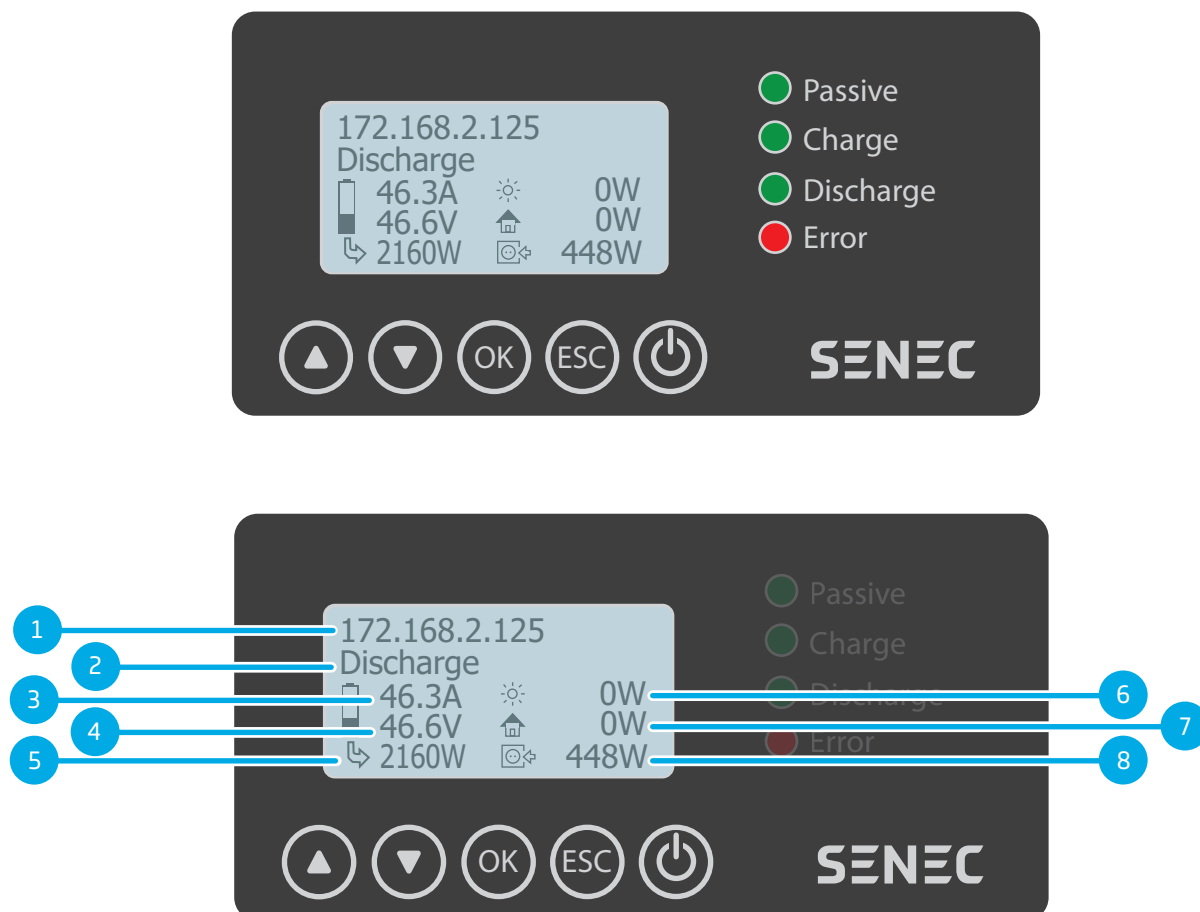


Fig. 3 Overview display indicators (exemplary values)

- 1 IP address of the SENEc.Home Li
- 2 Status display (see Chapter 4.4 Reading status indicators on the front display, page 18)
- 3 Charging or discharging current (depending on the current battery status - Charging or discharging)
- 4 Battery voltage
- 5 Charging or discharging output (arrow from battery = discharging, arrow to battery = charging)
- 6 Power indicator for self-generated current (e.g., from the PV system)
- 7 Power indicator for house consumption
- 8 Grid status (arrow to the left = grid feed, arrow to the right = mains supply)

4.1.2 Front display operation

The different control elements on the front display are described as follows; Also an overview is provided on how you can activate or inactivate your SENE.Home Li via the front display.

Control element	Description
	<p>The front display shows the status, IP address, battery voltage, charging and discharging current and the PV output. (see Chapter 4.1.1 Front display indicator, page 16).</p>
	<p>Navigation:</p> <p>Display lights are activated. So far, no other navigation keys functions.</p>
	<p>Switching on:</p> <p>Keep the On/Off button pressed for several seconds. <i>The display shows "Switch on?".</i> <i>The SENE.Home Li now switches the SENE.Inverter on.</i></p> <p>Confirm with "OK".</p>
	<p>Switching off:</p> <p>Keep the On/Off button pressed for several seconds. <i>The display shows "Switch off?".</i></p> <p>Press "OK" within 15 seconds <i>The SENE.Home Li now switches the SENE.Inverter off.</i> <i>The status changes to "Switched off".</i></p> <p>During disconnection, an option is provided to switch the system with its modules and battery inverter into a passive state. The system is out of operation.</p>
	<p>Escape:</p> <p>So far, the escape key has no function.</p>

4.2 Switching off the battery during prolonged non-utilisation

Even with a disconnected DC insulating switch, while the house circuit breaker is switched on ("Standby" operating mode), some current flows from the battery modules. An emergency charge can be performed via the grid. Disconnect the complete system from the mains to prevent deep discharge during a prolonged period of non-usage (period > 3 months, with previous full charge).

1. Inactivate the battery module with the "Switch off" function (see Chapter 4.1.2 Front display operation, page 17).
The MCU shuts down the battery module.
2. Inactivate the B 16 A fuse of the domestic grid.

4.3 Reading the IP address in the front display

The IP address of the SENECHome Li provides information on how the SENECHome Li is connected to the network.

IP address	Explanation
192.168.xxx.xxx or 10.xxx.xxx.xxx	SENECHome Li is connected to the customer's network (e.g. behind a router or professional network).
Network error or NPU fault	Network error

4.4 Reading status indicators on the front display

Status indicator	Meaning
BMS shutdown	The lithium modules were disconnected for safety's sake.
Battery empty	Normal operating status/grid operation The SENECHome Li storage unit will charge when an excess of PV generation is available.
Battery full	Normal operating status/grid operation The SENECHome Li storage unit can discharge as needed.
Off	The SENECHome Li storage unit was switched off via the display.
DC-switch off	DC isolating switch has been switched off.
Self-consumption	The PV generation covers the current house consumption. The SENECHome Li storage unit is neither charged nor discharged.
Discharge	Normal operating status/grid operation
Initial charge	First charge after initialisation of the SENECHome Li storage unit.
Remote shutdown	The system is switched off remotely. Operation is discontinued until the disconnection has been remedied.
Initial state	The SENECHome Li storage unit has not been configured yet and is commissioned for the first time.
Capacity test: discharge	A capacity test is running and the battery modules will be discharged
Capacity test: charge	A capacity test is running and the battery modules will be charged
Charge	Normal operating status/grid operation
Absorption phase	Normal operating status/grid operation The battery is practically fully charged and is being charged at lower power until it is detected to be "Fully charged".
Lithium safe mode active	The lithium modules are brought to a pre-set charge status in order to perform jobs such as module expansions. For this purpose, the system uses the generation and home consumption.
Lithium safe mode done	The lithium modules have reached a pre-set charge status and are now waiting for the termination of the safety mode.
Grid + discharge	In normal operating status/grid operation. The house consumption is covered by the mains supply and battery discharging.
Grid initialization	The system initialises according to the grid. The output of the inverter decreases slowly.
Grid stabilization	The system stabilises according to the grid. The inverter output decreases, as needed.

Status indicator	Meaning
Restart	The system restarts within the next minute.
Emergency charge	The battery charging status is too low. It will be charged with power from the mains to protect the battery.
Off-peak charge	The system charges based on the off-peak parameter setting.
Passive	Neither the energy generation nor the current consumption are high enough to trigger discharge or charging.
Peak-Shaving: wait	The system reduces the battery charging actively in order to enable maximum supply.
PV + discharge	Normal operating status/grid operation for concurrent PV generation. The house consumption is covered by the generation and battery discharging.
Safety charge ready	The SENE storage unit is fully charged and is waiting for user input.
Software update	The system performs a software update

Error message	Meaning	Recommended action
BMS error	At least one of the lithium modules is reporting a fault. All battery modules will be switched off for safety's sake. The SENE storage unit switches to Sleep mode.	A technician must be called.
BMS error operating temperature	Battery modules have switched off due to high or low temperatures.	Adjust the ambient temperature. Restart the equipment.
BMS Offline	The system does not receive any data from the battery modules.	A technician must be called.
Battery voltage error	The measured battery voltage is different from the battery type.	A technician must be called.
Fault: Halfbridge	A half-bridge on the SENE.Inverter is defective.	A technician must be called.
Fault: No connection to the master	Only for daisy-chained systems: In a slave system this error may be displayed if no connection was made to the master.	Check whether the display is activated on the master. A technician must be called.
Error battery inverter	<p>The SENE.Inverter does not function properly.</p> <ul style="list-style-type: none"> DC isolating switch Off Grid connection fault <p>No power supply from battery. Possible causes:</p> <ul style="list-style-type: none"> Battery modules are not switched on via the POWER switch. Erroneous master/slave setting on battery modules Faulty communication between battery modules <p>Communication faults. Possible causes:</p> <ul style="list-style-type: none"> Defective cabling Hardware fault on SENE.Inverter 	<p>Possible cause is a switched-off DC isolating switch. Switch it on again.</p> <p>If this is not changed, a technician must be called.</p>

Error message	Meaning	Recommended action
Error electricity meter	Communication fault with one/several power meters (according to connection variant). Causes: <ul style="list-style-type: none"> ▪ Erroneous configuration for the "House power meter" in the configuration wizard ▪ Erroneous power meter selection ▪ Faulty BUS installation 	A technician must be called.
Connection error (grid-protection)	There is a grid connection fault at the mains connection, preventing the connection to a supply network.	A technician must be called.
Rotary field error (grid-protection)	Mains connection has detected a fault of the supply network and is preventing connection to the grid. Possible causes: <ul style="list-style-type: none"> ▪ Voltage too high/too low (AC cabling of insufficient cross-section and/or cable too long, poor grid at the feed point into the house, too much or too little generation and/or consumption in the domestic power network) ▪ Frequency too high/too low ▪ Phase displacement between L1/L2/L3 too large ▪ Output capacities too high 	If the error message persists (>12 h), a technician must be called.
Relais error (grid-protection)	Grid network protection is defective and must be replaced.	A technician must be called.
Error inverter communication	Communication fault between MCU and SENECA Inverter.	A DC-switch may be disconnected. Switch it on again. If this is not changed, a technician must be called.
No server connection	No connection to the mein-senec.de for a continuous 24 hour Internet connection. Normal operation starts up automatically once the connection is restored.	Perform a router restart. Also check all network connections. If this is not changed, a technician must be called.
Man. safety charge error	An error occurred during the manually triggered safety charging.	A technician must be called.
Emergency charge: error	Error during automatic emergency charge. The battery modules will pass into sleep mode.	A technician must be called.
NPU error	Communication fault between MCU and NPU.	A technician must be called.
Faulty SD card	Faulty SC card in the MCU.	A technician must be called.
Safety charge error	An error occurred during safety charging.	A technician must be called.

4.5 Operating conditions

According to the switch setting, the following operating modes are available:

DC isolating switch	B 16 house circuit breaker	Mode
ON	ON	Normal operation
ON	OFF	Mains backup operation
-	ON	Standby
OFF	OFF	Switched off

5 Online Monitoring mein-senec.de

The online monitoring at mein-senec.de provides access to all current data and time series of your SENECHome Li. With an available Internet connection, login directly to mein-senec.de for the installation of the system. After completing the configuration wizard, your installer creates an account with your data. The access data are automatically transmitted to the provided e-mail address. If any access data are changed afterwards, please contact SENECHome Li.

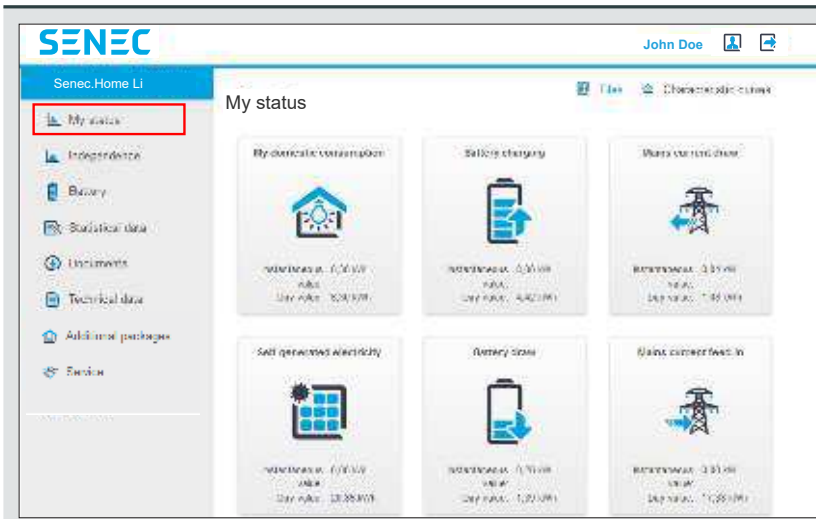
The online monitoring provides a first remote diagnosis of faults or defects. For this purpose, your installer or a SENECHome Li employee access the data in your system in order to provide support via remote diagnosis. You may also prevent the installer from viewing your data.

Personal data are subject to the data protection law. SENECHome Li employees shall always maintain your personal data confidential and take the appropriate technical and organizational measures to protect personal data against unauthorized access, unlawful processing or disclosure, as well as against accidental loss, alteration or destruction.

Picture	Action
	<p>Login</p> <p>You can login here mein-senec.de. Enter your access data.</p> <p>Click "Login" and confirm your registration.</p>

Picture

Action



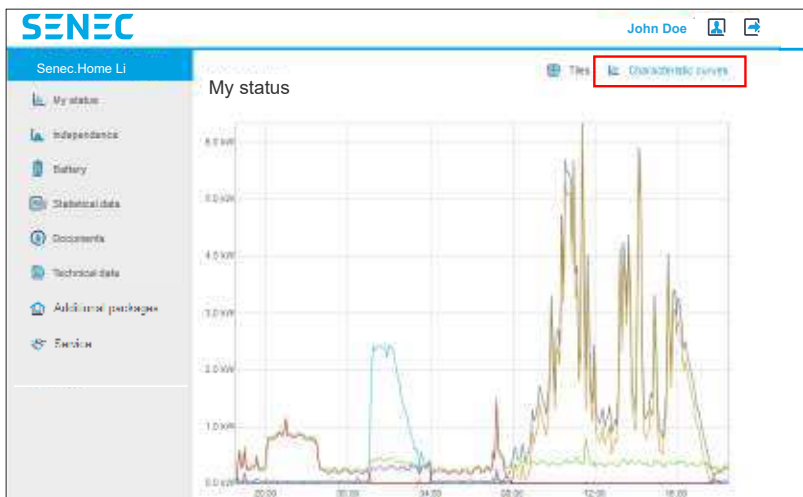
Start page/My status

After the successful login, the start page of mein-senec.de is displayed.

In the menu view you access automatically the menu tab "My Status".

„My status“ lists the current data on domestic consumption, self-generated electricity, battery charging, battery draw, mains current draw as well as mains current feed-in.

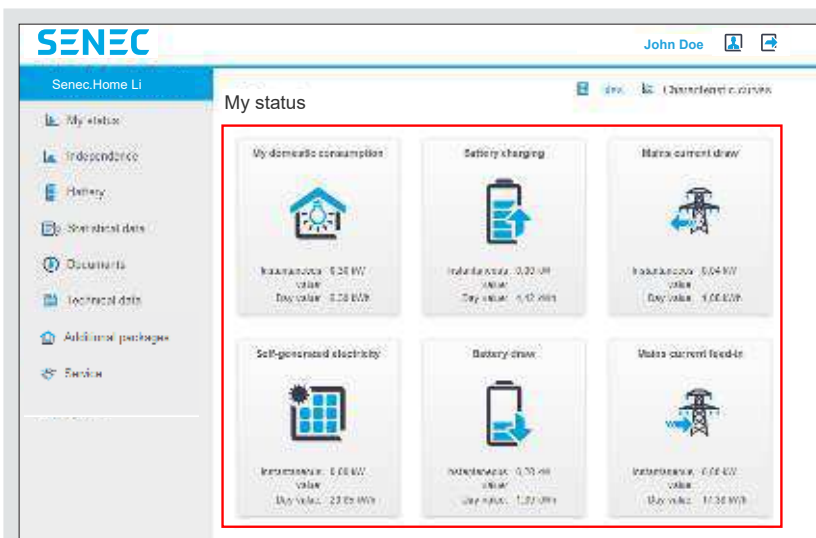
To the left a navigation bar is shown.



My status in characteristic curves

You may also select a display of the current values in a characteristic curve diagram.

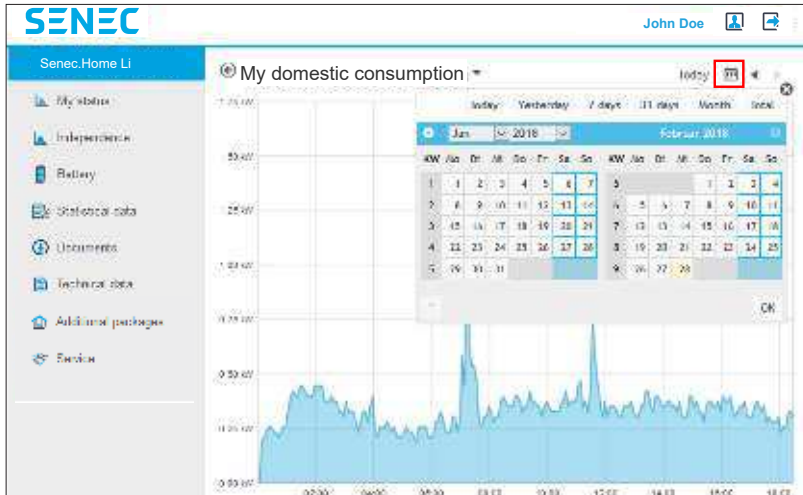
In the Home menu, select "Characteristic curves" in the top right corner. You return to the tile view by clicking "Tiles" in the upper right corner of the Home menu.



The following pages provide a description of the single tiles on the start page.

Picture

Action



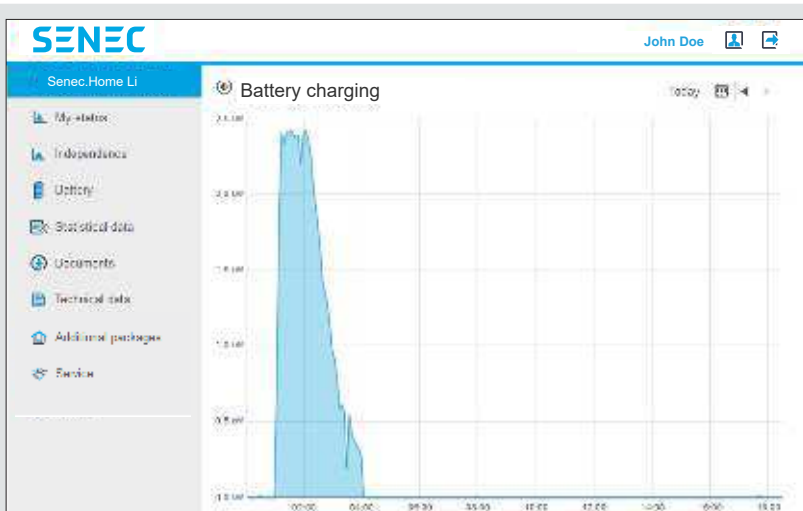
My domestic consumption

Under „My domestic consumption“, your domestic consumption is shown in kW.

Use the calendar symbol to show the values for any defined time period. Set the corresponding month and year in the provided fields. Click the required day in the calendar.

The following time periods can be selected: Today, yesterday, 7 days, 31 days, month and All.

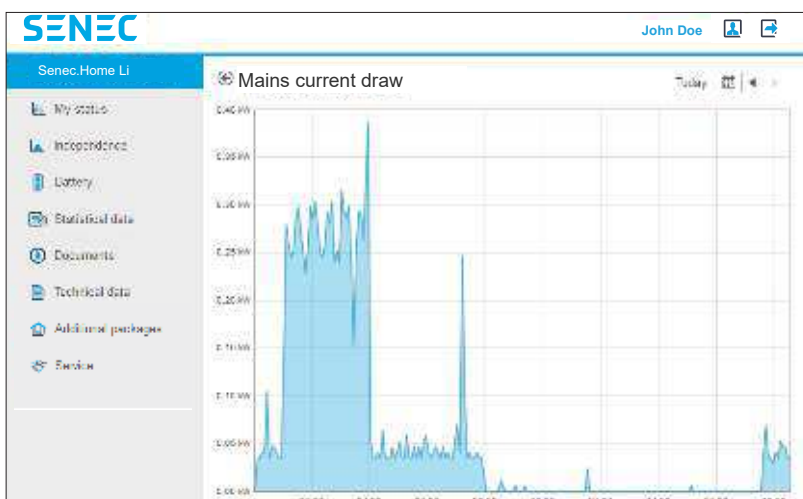
Click "OK" to confirm your selection.



Battery charging

Under „Battery charging“, the current battery charge is displayed in kW.

Use the calendar symbol to show the values for any defined time period.



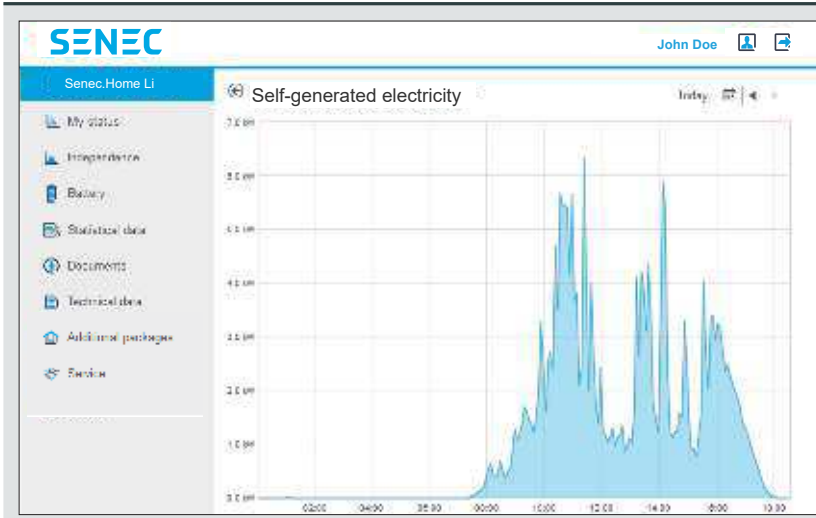
Mains current draw

Under „Mains current draw“, the actual mains current draw is displayed in kW.

Use the calendar symbol to show the values for any defined time period.

Picture

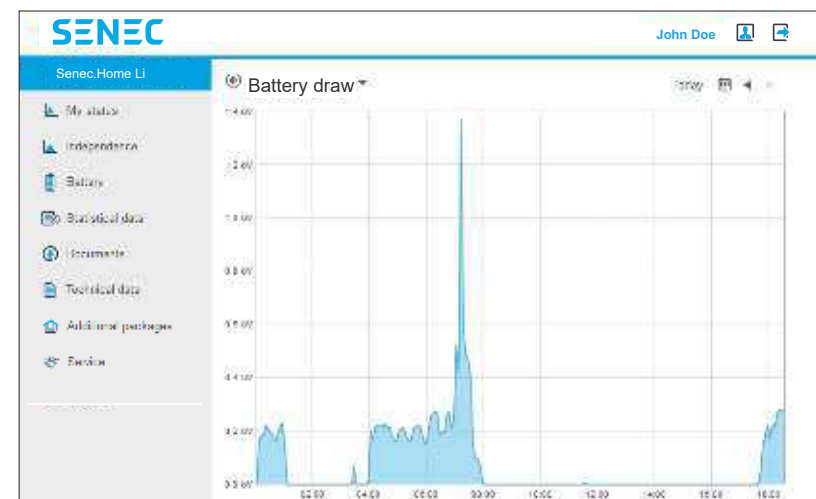
Action



Self-generated electricity

Under "Self-generated electricity", the current you have generated yourself through your generator system is displayed in kW.

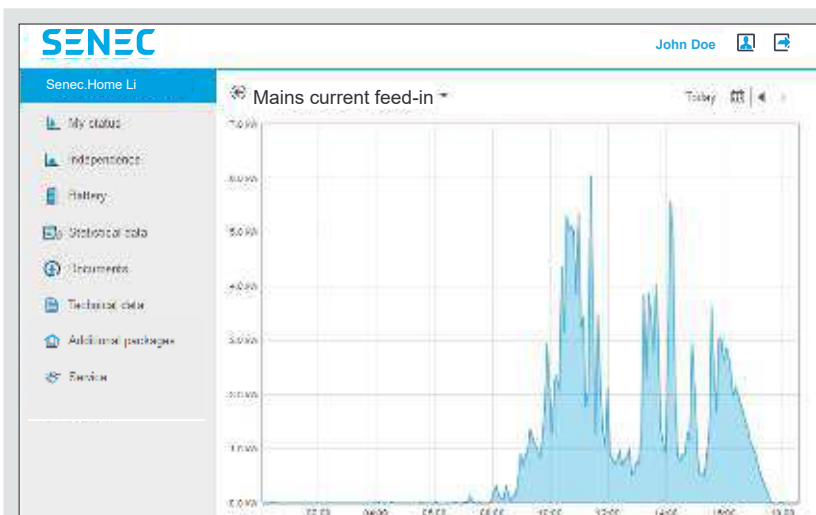
Use the calendar symbol to show the values for any defined time period.



Battery draw

Under „Battery draw“, the current battery draw is displayed as current kW.

Use the calendar symbol to show the values for any defined time period.



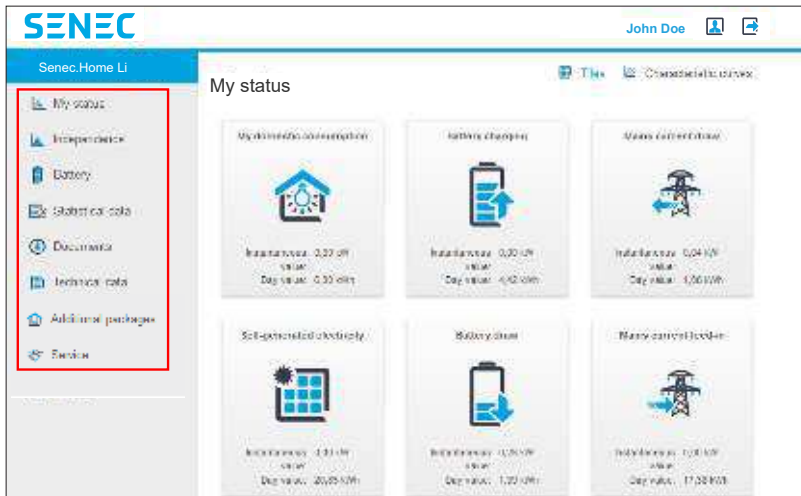
Mains current feed-in

Under „Mains current feed-in“, the mains current feed-in is displayed in kW.

Use the calendar symbol to show the values for any defined time period.

Picture

Action



The following pages provide an explanation of the selection options in the navigation bar (to the left of the screen).



Independence

An overview of your independence is displayed here. The level of independence for the current day, the current week, the current month, the current year and the overall independence are displayed.



Battery

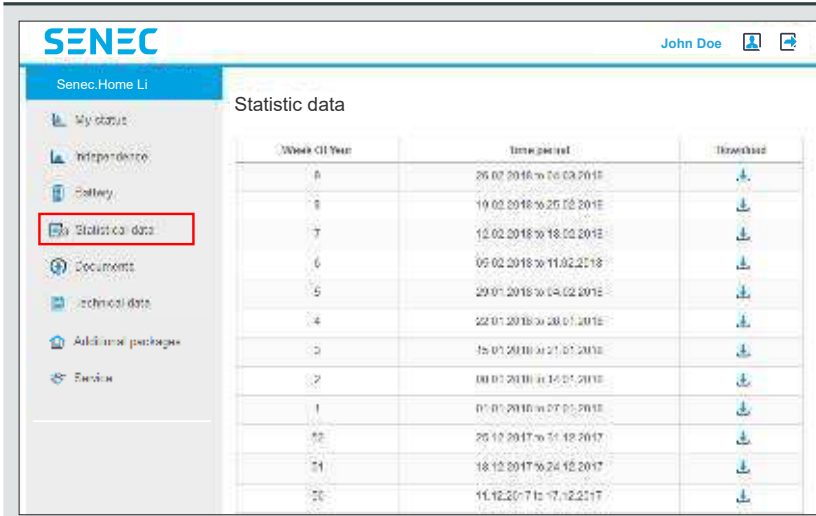
In the „Battery“ menu tab, detailed information on the battery module installation is displayed:

- Battery voltage
- Battery current

Both the battery voltage and battery current are displayed in chronological sequence in a diagram.

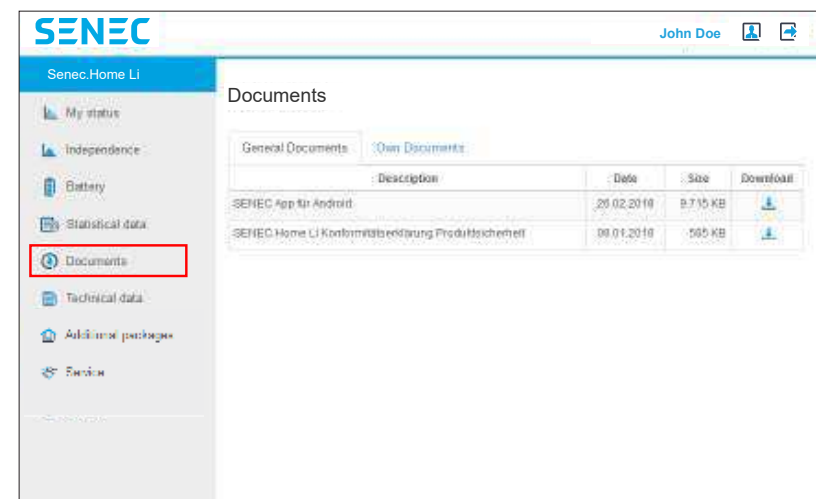
Picture

Action



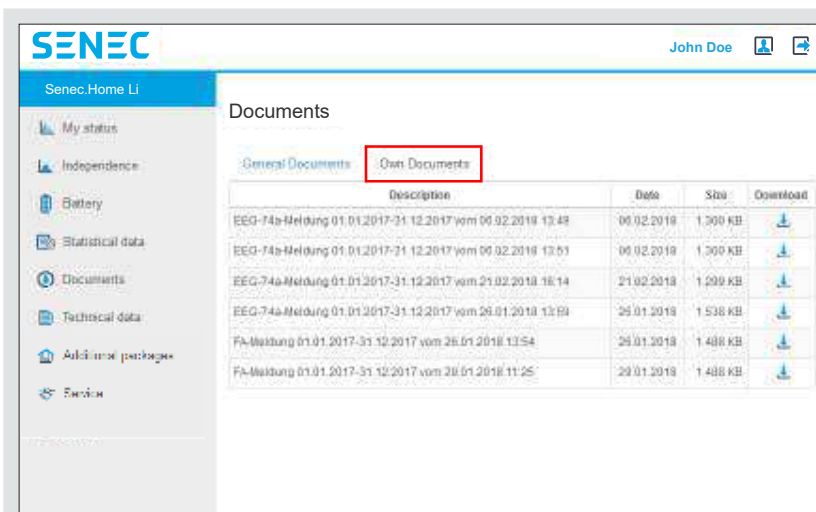
Statistical data

Here you can download and save information on your power consumption (weekly) in an Excel file.



General documents

Here you can download and save the different documents (e.g. flyers, manuals and data sheets) to your system.

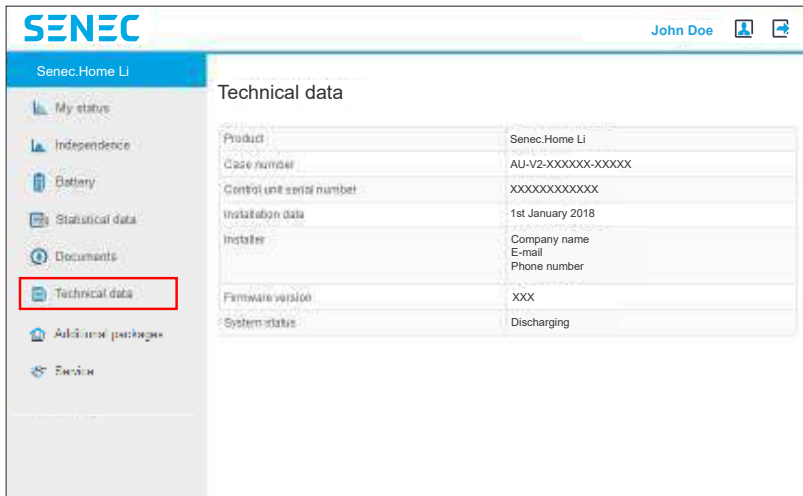


Own documents

Here you can download and save personal documents.

Picture

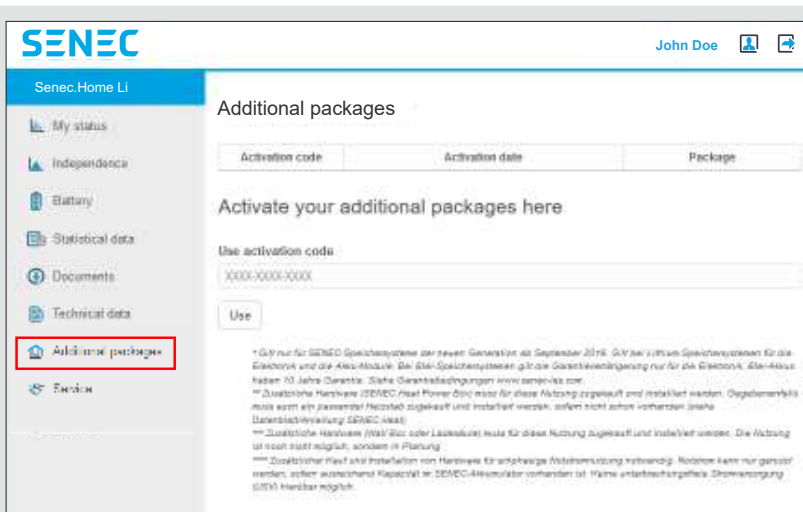
Action



Technical data

Under „Technical data“ the following data are displayed:

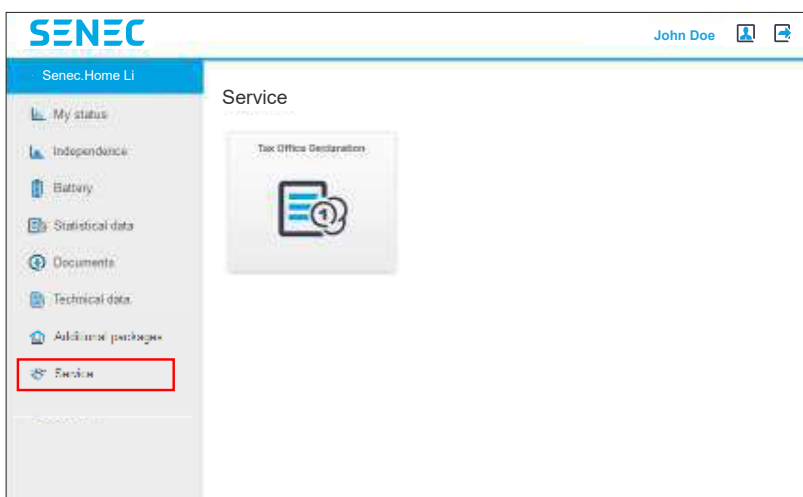
- Product name of your system
- Case number
- Control unit serial number
- Installation date
- Name of your installer
- Current firmware version of the control unit (MCU)
- Current system status



Additional packages

In the „Additional packages“ tab, you activate your additional packages by entering the code in "Use activation code".

Finish the activation of the additional packages, by clicking the „Use“ button.



Service

The „Service“ tab allows you to require services, e.g. "Tax Office Declaration".

Picture

Action

Tax office Declaration

In the portal you create a declaration to submit to the tax office. Fill in the fields completely. Help is provided in the "Documents" tab under "General Documents".

Click "Create document" to finish the process. The tax office report is created automatically and can be saved. With "Cancel" the process is interrupted.

Profile settings

Under „Profile settings“, you change your user account.

Under „Change password“, you change your password.

Under "Profile", you edit your profile data. You may also block access to your installer here.

Change password

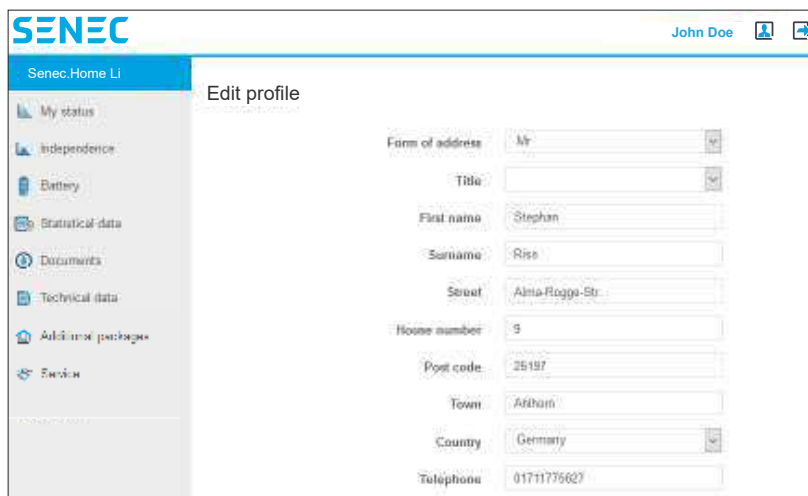
Under „Change password“, you change your password.

Enter your old password, your new password and repeat it in "Repeat".

Click "Change password" to finish the process. With "Cancel" the process is interrupted.

Picture

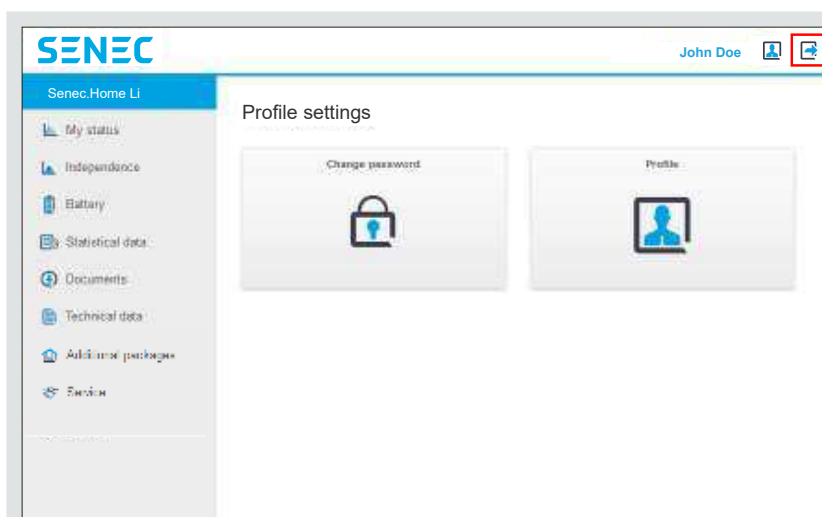
Action



Profile edition

Under "Profile", you edit your personal data. Here you can also define whether or not to authorize the installer to access the online monitoring and cloud data.

Click "Save" to finish the process. With "Cancel" the process is interrupted.



Logout

Logout first before you leave the portal.

Click logout in the highlighted symbol in the upper right corner of the screen.

6 Mains backup operation (optional)

Mains backup operation is provided in case of an emergency when power fails. This means that in case of a power failure, only the elementary significant consumers are connected, e.g. for light and cooling, the loading of mobile telephones or for using a sewer pump in the cellar. It is intended to sensibly use the power capacity in the battery of the SENEK storage unit. Note that mains backup operation is only available as long as there is sufficient battery capacity available.

NOTICE

Instruction!

➤ If you have activated the mains backup operation, or if you wish to do so, please contact your installer.

For the installation of a backup power box for one or several consumers, ensure that there is electric safety which is only guaranteed by the purchase of the SENEK backup power box. The backup power box is provided with an activation code, which is activated to enable the mains back up operation.

In case of a power failure, the mains backup operation provides maximum 1000W output power for the usual household consumers (e.g. refrigerator, freezer, sewer pump, LED, light bulb, mobile telephone, etc.).

Note that some devices with a high output are not supported by mains backup operation (e.g. vacuum cleaner, old refrigerators and freezers).

7 Maintenance

No maintenance is required for the SENEK.Home.Li. Check the storage activity at regular intervals, depending on the installation site (see Chapter 7.1 Testing the storage activity, page 30). Clean the system when it is dirty (see Chapter 7.3 Cleaning, page 31). Ensure that there are no residues in the ventilation outlets.

7.1 Testing the storage activity

Test interval	Tasks
2 weeks	Check that there is no system fault ("Fault" lamp lights up in red on the display).
6 months	Check whether there are any changes of charge condition (on a sunny day, with a correct configuration, the system must be charged at 100%).

7.2 Maintenance of the battery module

The battery modules are protected by an internal battery management system.

Maintenance	Function
Temperature	<ul style="list-style-type: none"> Permanent cell temperature monitoring by the BMS Emergency stop with high or low temperatures
Deep discharge	<ul style="list-style-type: none"> Permanent cell monitoring by the BMS Emergency charge to prevent deep discharge Emergency stop during emergency charge error
Overcharge	<ul style="list-style-type: none"> Permanent cell monitoring by the BMS Emergency stop with high voltages and high charge current

7.3 Cleaning

NOTICE

Material damages due to improper cleaning agent and unallowed water usage!

Improper cleaning agents may scratch the surfaces of the system. Water may penetrate inside the storage system and cause damages to the system.

- Do not use an abrasive cloth or sponge for cleaning the system.
- Do not use an abrasive or chlorine-containing cleaning agent.
- Clean the surface of the system with a humid cloth, but never a soaked one.
- Do not use a water jet for the system.

Carefully clean the outer panel of the system with a clean, soft humid cloth. For the removal of stubborn contaminants, use a small quantity of a commercial detergent on the humid cloth.

8 Disposal

Never dispose the SENECHome Li and its components with the domestic waste.

Contact SENECHome or your installation company. Ensure that this company takes care of the proper dismantling and disposal of the system.

9 Index of abbreviations

Abbreviation	Meaning
AC	Alternating Current
BMS	Battery Management System
DC	Direct Current
GUI	Graphic User Interface
MCU	Main Control Unit
NPU	Network Processing Unit
PV	Photovoltaic