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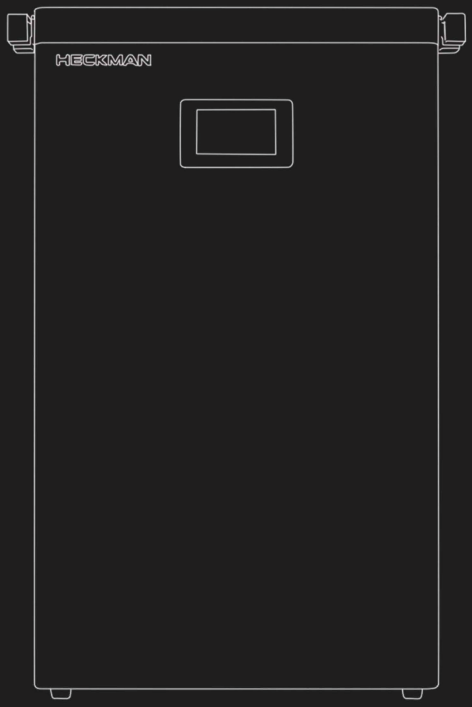

USER MANUAL

Energy Storage
WLFP51200A

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Table of contents

1. Lithium-ion batteries general safety notes

Warning:

1. Before installing or using the batteries, please read the operating instructions carefully . Failure to follow the instructions or warnings in this document can lead to damage to the battery or the entire system, as well as to electric shock, serious personal injury or even death.
2. The product is intended for use in low voltage energy storage systems in buildings. Do not use it in other places.
3. It is prohibited to use any cleaning detergents to clean the battery.
4. It is prohibited to expose the battery to flammable or irritating chemicals or vapours.
5. The installation environment of the battery should be away from fire and water.
6. It is prohibited to paint any part of the battery, including any internal or external components.
7. The direct connection of batteries to photovoltaic panels is prohibited.
8. The direct connection of the battery to an AC power source is prohibited.
9. The insertion of any foreign object into any part of the battery is prohibited.
10. It is prohibited to toggle the switch on an inactive product. This prevents battery power being consumed.
11. If the battery is not used for a long period of time, it must be recharged every 6 months, with each SOC charge not less than 90%.
12. After the discharge protection has been activated the battery must be recharged within 12 hours.
13. Special attention must be paid to personal safety if the battery's DC output voltage is above 48 volts.
14. All terminals must be disconnected before maintaining the battery.

Before connecting:

1. After opening the packaging, inspect the product and checklist. If you notice damage to the product or missing items contact your dealer or distributor.
2. Before installation, disconnect the external battery power and make sure the battery is turned off.
3. Connect the cables correctly. Be careful about confusing the polarity of the positive and negative wires. Make sure that there are no short circuits with external devices.
4. Do not connect batteries directly to mains power.
5. When connecting batteries to the system, ensure that the system is well earthed.
6. Make sure that the electrical parameters of the battery system are compatible with the associated equipment.

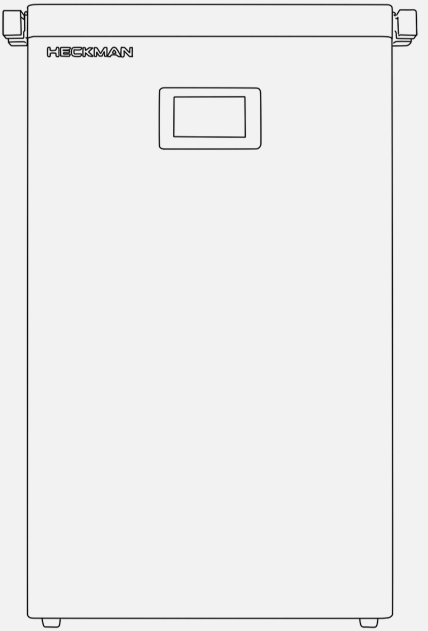
During use:

1. When moving or repairing the battery, switch off the power supply and completely disconnect the battery.
2. Do not mix different types of batteries.
3. Do not use a battery with a damaged or incompatible inverter.
4. Do not disassemble the battery into individual components.
5. In case of fire, use a suitable fire extinguishing tool for lithium batteries.
6. Only authorized personnel should open, repair, or disassemble the battery. The seller is not responsible for failure to comply with the requirements and safety standards related to the design, production, and use of devices.
7. Failure to comply with the instructions in this manual may invalidate the warranty.

2. Product introduction

The WLFP51200A is a lithium iron phosphate (LiFePO4) battery designed for building energy storage systems.It is an advanced product developed in response to new trends and evolving needs in energy storage, as well as requirements for new types of emergency power supply. The product has features of integration, miniaturisation, lightness, intelligence, standardisation and has been developed in compliance with environmental requirements. It can be used with a wide range of devices, such as inverters, photovoltaic modules, etc., in various areas of building energy storage. It has certifications: CE, UL, IEC, UN 38.3, etc.

2.1 Appearance of product



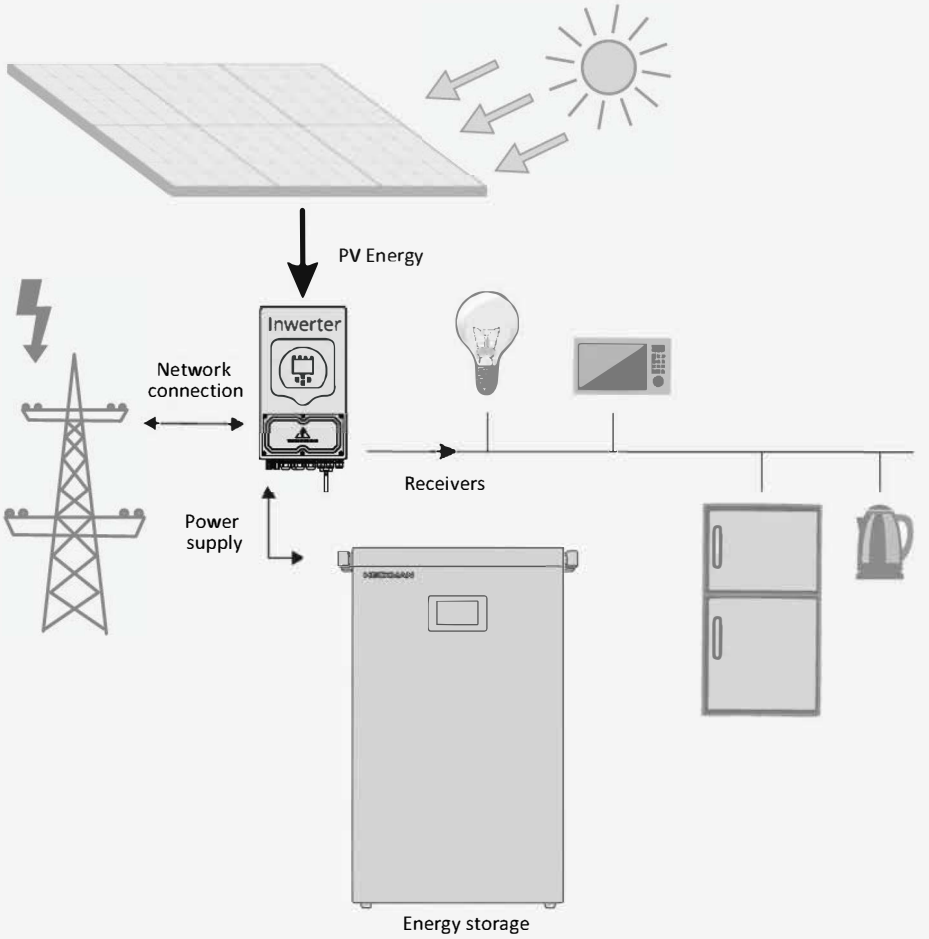
Note: Due to product updates, any changes will be implemented without additional notice. The actual deliveries of the product will be decisive.

2.2 Product features

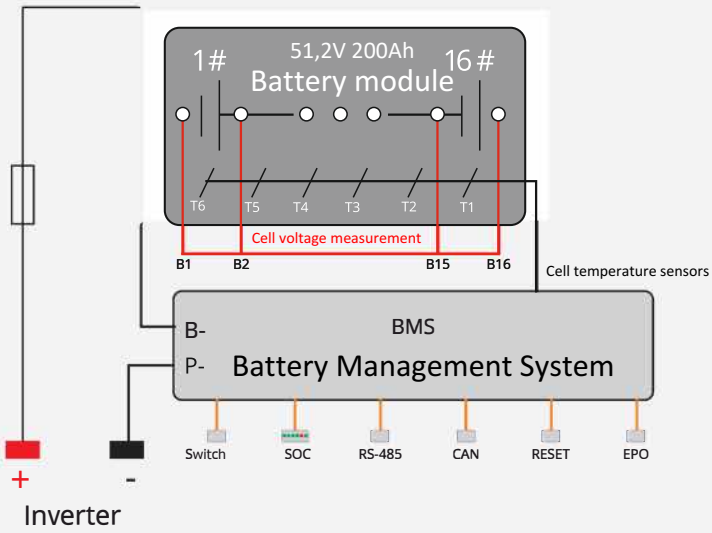
- Small size, light weight, safe and reliable, eco-friendly, long device life.
- High energy density, stable voltage, support for fast charging and discharging.
- Wide operating temperature range.
- Possibility of installation on the ground or on the wall.
- Ability to combine multiple modules to increase capacity according to system requirements.
- Extensive alarm and protection functions against overload, overcharge, overdischarge, short circuit, high temperature, low temperature, as well as differential (balancing) and overcurrent protection functions.
- RS-485 and CAN interfaces for digital communication with parallel modules and inverter.
- Touchscreen with LCD display on the front panel for real-time display of product information.
- External Power Off (EPO) connector for remote battery shutdown.

2.3 Product principles

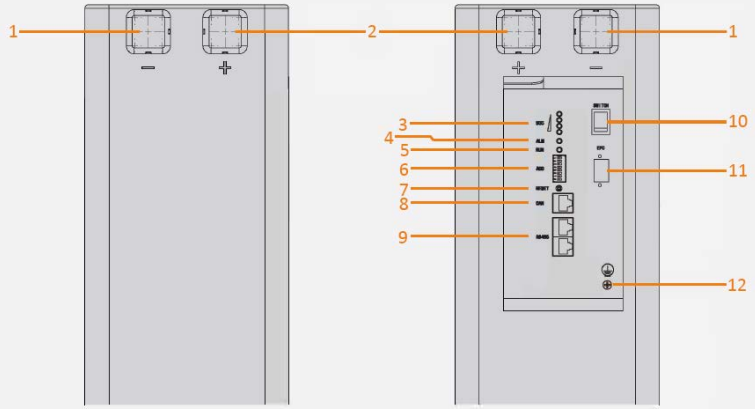
The main purpose of the product is to provide emergency power to building equipment via an inverter. With the inverter settings, the power source for electrical equipment can be selected - from the power grid or the battery. The battery is charged via the inverter from the photovoltaic panels and the power grid.



Product architecture



2.4 Side panel operating instructions



Panel interface description:

1. Negative terminal - negative input and output of the battery.
2. Positive terminal - positive input and output of the battery.

3. The battery level indicator consists of four green LEDs that show the current battery level (from left to right LED1 -LED4).

State	Charging				Discharging			
Capacity indicator	L1	L2	L3	L4	L1	L2	L3	L4
0~25%	blinks	off	off	off	lights	off	off	off
25~50%	lights	blinks	off	off	lights	lights	off	off
50~75%	lights	lights	blinks	off	lights	lights	lights	off
75~100%	lights	lights	lights	blinks	lights	lights	lights	lights
Batt. capacity indicator	constant light				blinking mod. 2			

4. Alarm indicator - red LED, see table below for details.
5. Operating indicator - green LED, see table below for details.

System status	Protection/alarm/ normal	RUN	ALM	Batt. cap. indicator	Instruction
OFF	sleep mode	off	off	off – no light	The device is in sleep mode
Standby mode	normal	blinking mod. 1	off	see table point 3	The device is in standby mode
	alarm	blinking mod. 2	blinking mod. 2	see table point 3	The device is in fault mode. Restart the battery. If the problem persists, contact an authorised Heckman service centre

System status	Protection/alarm/ normal	RUN	ALM	Batt. cap. indicator	Instruction
		●	●	● ● ● ●	
Charging	normal	lights	off	see table point 3	Battery charging in normal mode
	alarm	lights	mig. 2	see table point 3	Battery works on overload limit
	overload protection	lights	off	lights	Battery fully charged
	battery overload	off	lights	off	The device is in fault mode. Restart the battery. If the problem persists, contact an authorised Heckman service centre
Discharging	normal	blinking mod. 2	off	see table point 3	Battery discharges in normal mode
	alarm	blinking mod. 2	blinking mod. 2	see table point 3	Battery works on overload limit
	protection against overvoltage, short-circuit, reverse connection and other types of overload	off	lights	off	The device is in fault mode. Check the correct battery connection and inverter settings. If the alarm cannot be cleared, contact with an authorised Heckman service centre

LED blinking modes

Blinking modes	ON	OFF
blinking mod. 1	0,25 sec	3,75 sec
blinking mod. 2	0,5 sec	0,5 sec

6. DIP code switch - an 6-bit binary code switch is used to set the battery addresses when connected in parallel.

Definition of bits 1-6 of the DIP code switch: On the individual batteries connected as ***slaves*** on each DIP switch, bits 1-4 are used to set the address for the respective slave battery. On a battery set as ***master***, bits 1-5 on the DIP switch are used to set the number of all batteries working as slave, bit 6 is used to set the battery working as master.

Configuration DIP switches on batteries working as *slaves*: The addresses for each slave battery are set in turn according to its order. Bits 1 to 4 on the DIP switches are used for this purpose. The address range of the slaves is 1 to 15. Bits 5 and 6 are fixed and must be set to 0 (OFF) on each slave battery. The same address cannot be set on any slave battery (see slave configuration table).

Configuration DIP switches on battey working as *master*: Bits 1 to 5 specify the number of slaves connected in parallel. Bit 6 remains constant and is equal to 1 (ON), this indicates the setting of the battery as master (see master configuration table). If there is only one battery, set all bits to 0 (OFF).

Table for configuration DIP switches on batteries working as slaves

Adress	DIP switch position						Description
	#1	#2	#3	#4	#5	#6	
1	ON	OFF	OFF	OFF	OFF	OFF	adress 1
2	OFF	ON	OFF	OFF	OFF	OFF	adress 2
3	ON	ON	OFF	OFF	OFF	OFF	adress 3
4	OFF	OFF	ON	OFF	OFF	OFF	adress 4
5	ON	OFF	ON	OFF	OFF	OFF	adress 5
6	OFF	ON	ON	OFF	OFF	OFF	adress 6
7	ON	ON	ON	OFF	OFF	OFF	adress 7
8	OFF	OFF	OFF	ON	OFF	OFF	adress 8
9	ON	OFF	OFF	ON	OFF	OFF	adress 9
10	OFF	ON	OFF	ON	OFF	OFF	adress 10
11	ON	ON	OFF	ON	OFF	OFF	adress 11
12	OFF	OFF	ON	ON	OFF	OFF	adress 12
13	ON	OFF	ON	ON	OFF	OFF	adress 13
14	OFF	ON	ON	ON	OFF	OFF	adress 14
15	ON	ON	ON	ON	OFF	OFF	adress 15

Table of DIP switch configurations on the battery working as a maser

Number of parallel connected devices*	DIP switch position						Description
	#1	#2	#3	#4	#5	#6	
1	OFF	OFF	OFF	OFF	OFF	OFF	paralell to 1 device
2	ON	OFF	OFF	OFF	OFF	ON	paralell to 2 devices
3	OFF	ON	OFF	OFF	OFF	ON	paralell to 3 devices
4	ON	ON	OFF	OFF	OFF	ON	paralell to 4 devices
5	OFF	OFF	ON	OFF	OFF	ON	paralell to 5 devices
6	ON	OFF	ON	OFF	OFF	ON	paralell to 6 devices
7	OFF	ON	ON	OFF	OFF	ON	paralell to 7 devices
8	ON	ON	ON	OFF	OFF	ON	paralell to 8 devices
9	OFF	OFF	OFF	ON	OFF	ON	paralell to 9 devices
10	ON	OFF	OFF	ON	OFF	ON	paralell to 10 devices
11	OFF	ON	OFF	ON	OFF	ON	paralell to 11 devices
12	ON	ON	OFF	ON	OFF	ON	paralell to 12 devices
13	OFF	OFF	ON	ON	OFF	ON	paralell to 13 devices
14	ON	OFF	ON	ON	OFF	ON	paralell to 14 devices
15	OFF	ON	ON	ON	OFF	ON	paralell to 15 devices
16	OFF	OFF	OFF	OFF	ON	ON	paralell to 16 devices

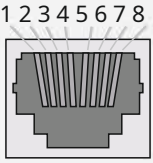
*Number of all devices *(slave + master)*

7. The reset button combines three functions: activation, sleep and reset.

Functions	Definition
Activation	If the BMS is in sleep mode, when this button is pressed the BMS will be activated and the LEDs will flicker sequentially, after which the BMS will enter its normal operating state.
Sleep mode	If the BMS is in standby or discharge mode, the BMS will enter sleep mode when this button is pressed and hold for 3 seconds. After the LEDs flash again, the BMS enters sleep mode.
Reset	If the BMS is in standby or charge/discharge mode, it will be reset by pressing and holding this button for 3 seconds.

8. CAN – communication port with the inverter via the CAN or RS-485 protocol.

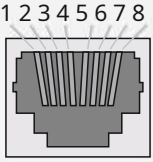
PIN	Definition
PIN 4	CANH
PIN 5	CANL
PIN 2, 7	485-1A
PIN 1, 8	485-1B



⚠ **Note: Please use a special communication line to communicate with the inverter.**

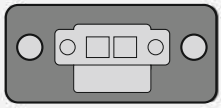
9. RS-485 – port for cascade communication, enabling data transmission between devices via the RS-485 interface.

PIN	Definition
PIN 2, 7	485-1A
PIN 1, 8	485-1B
PIN 6	485-2A
PIN 5	485-2B



10. Switch - When the BMS switch is turned off, the BMS goes into sleep mode while turning off the charge and discharge MOSFETs.
After starting the system, the device goes to normal operation mode.

11. EPO - External Power Off connector, remote battery shutdown. Possibility to connect an external relay controlling battery shutdown, e.g. for fire protection systems.



Opening the EPO contact will turn off the battery. Shorting the EPO contact makes it possible to turn the battery on and off using the switch (10). If no external switching device is connected, use the cable bridge included in the set.

12. The ground terminal is for connection to ground.

2.5 Product specifications

Before installing and using this product, the relevant inverter parameters must be carefully set according to the specifications given. The set product parameters must not be changed at will, otherwise the performance and functionality of the product will be seriously affected!

Basic product parameters

Model and specifications	WLFP51200A
Battery type	LiFePO4 battery in a pack arrangement
Nominal Voltage	51 V
Nominal Capacity	10,24 kWh
Storage Capacity	9720 Wh/9,72 kWh
Battery Dimensions	width 570 × depth 202 × height 855 mm
Weight	90 kg
Operating temperature	-15–60℃
Operating relative humidity	≤90–40℃ ±2℃
Altitude	0–3600 m
Operating atmospheric pressure	70 kPa–103 kPa
Noise level generated	0 dB

Charging specifications

Model and specifications	WLFP51200A
Charging Current	<= 200 A(1C)
Recommended Charging Current	60 A(0,3C)
Single cell overvoltage alarm	3,50 V
Single cell overvoltage alarm delay time	2000 ms
Protection against single cell overvoltage	3,60 V
Single cell overvoltage protection delay time	1000 ms
Total overvoltage alarm	56 V
Delay time of the total overvoltage alarm	1000 ms
Protection against excessive total voltage	57 V

Model and specifications	WLFP51200A
Excess protection delay time total voltage	1000 ms
Overcharge current alarm	200 A
Delay time for overcurrent charge alarm	1000 ms
Protection against excessive charging current	220 A
Overcurrent protection delay time	10 000 ms
High charge temperature alarm	50°C
Low charging temperature alarm	2°C
Protection against high charging temperatures	55°C
Protection against low charging temperatures	0°C

Parametry techniczne rozładowania

Model and specifications	WLFP51200A
Discharge Current	≤200 A
Single cell overdischarge alarm	3 V
Single cell overdischarge alarm delay	2000 ms
Single cell over-discharge protection	2,90 V
Single cell over-discharge protection delay	1000 ms
Total battery overdischarge alarm	48 V
Over-discharge alarm delay full battery discharge	1000 ms
Protection against overdischarge of the entire battery	46,4 V
Whole-battery over-discharge protection delay	1000 ms
Overdischarge current alarm	210 A
Overcurrent alarm delay	1000 ms
Protection against overdischarge current	220 A
Overcurrent protection delay discharge current	10 000 ms

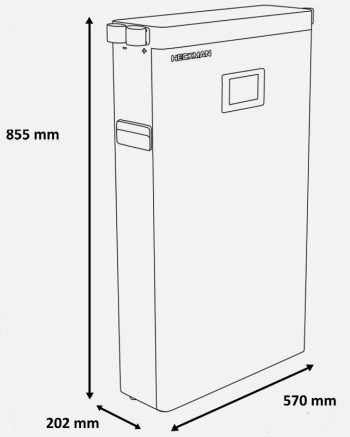
Model and specifications	WLFP51200A
High temperature alarm during discharge	52℃
Low temperature alarm during discharge	-10℃
Protection against high temperatures during discharge	60℃
Protection against low temperature during discharge	-15℃

3. Product installation

Attention:

1. T he installation, commissioning and maintenance processes of the product should be carried out by qualified personnel. Before installing and using the product, the safety rules and installation procedures of the product must be carefully read and understood. It is imperative that the relevant safety regulations are strictly adhered to in order to avoid improper actions that may cause injury or damage to the product.
   2. check that the inverter and the product are switched off before installation.
   3. check that the cables are properly insulated and prevent situations where there is exposure of metallic parts of the cables.
   4. Ensure that the photovoltaic energy storage system is properly earthed during installation.

Product dimensions:



3.1 Devices and tools

Suggested safety tools and materials for product installation

Screwdriver

Multimeter

Iso-gloves

Goggles

Iso-footwear

⚠ **Attention:**

Use appropriate insulated tools to prevent accidental electric shock or short circuit

3.2 Cleaning

Cleanliness conditions affect the insulation performance of the system, therefore, before installing and commissioning the system, it is necessary to remove dust and iron shavings. The working environment must not be dusty and must have certain anti-dust properties. During continuous operation of the system, dust and humidity levels should be checked regularly to ensure a clean working environment.

3.3 Specifications

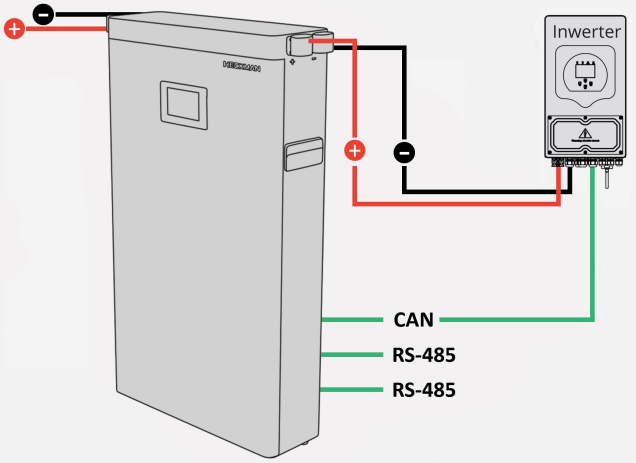
1. First, check that the product packaging is not damaged and meets the required specifications.
2. After opening the package, check that all items are complete and in good condition according to the checklist prepared during packing.
3. Remove items from the packaging carefully so as not to damage their surface, which may affect their aesthetics.
4. Make sure that the connecting cable used is of the appropriate diameter.

5. Before use, ensure that all metal tools are insulated.
6. The arrangement of cables should be well-thought-out and orderly. Protection against moisture and corrosion should be considered.
7. After installation, check that all connection screws are securely tightened and that the connectors are stable.

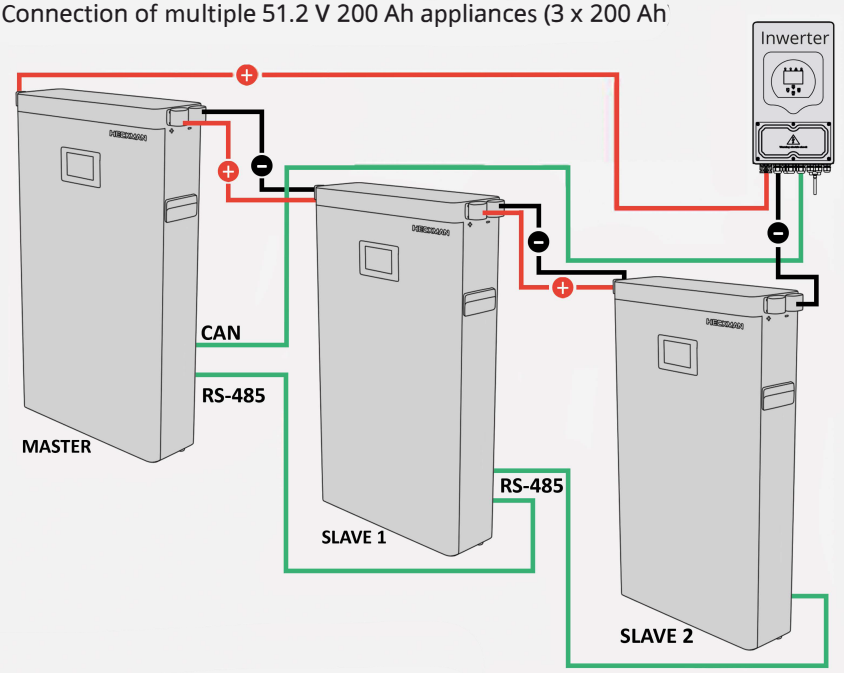
3.4 Installation method

3.5 Communication with the inverter

Connecting a single device:



Connection of multiple 51.2 V 200 Ah appliances (3 x 200 Ah)



List of compatible inverters

No.	The manufacturer's name	Inverter model	Communication interface
1	SMA	SUNNY ISLAND 6.0H-13	CAN
2	Studer	XTM 4000-48	CAN
3	Ginlong	RHI-5K-48ES-5G	CAN
4	Axpert-KING	Axpert-KING 3KW Rack	485
5	SRNE	HF4850S80-145	485
6	Goodwe	GW3648D-ES	CAN
7	Victron	48-3000-35	CAN
8	Sofar	HYD 3000-ES	CAN
9	DEYE	SUN-3.6K-SG03LP1-EU	CAN
10	Growatt	SPF 3500 ES	485/CAN
11	Afore	AF5K-SL	CAN
12	Mager	R5KL1	CAN
13	TOPRAY	CK8.0S	CAN
14	Ginlong	Solis_RAI-3K_ENX_V01	CAN
15	MUST	Ph18,2-5.5KW	CAN
16	Eliosolar	VM III	485
17	Pengcheng	SNA5000 WPV	CAN

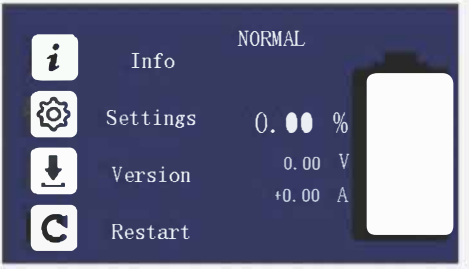
4. Product usage

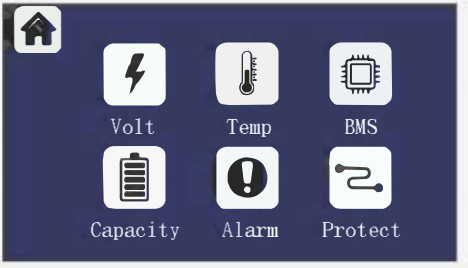
4.1 Detailed operating instructions for the product

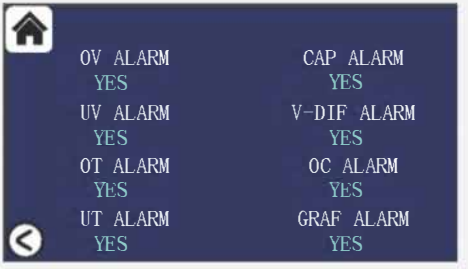
1. 0nce the product installation is complete, turn on the switch (1 0) on the side panel and the product will enter standby mode. The operation LED lights up and the capacity indicator shows the remaining battery power.
2. When the product is charging, the operation LED is lighted and the capacity indicator flashes to indicate the current battery charge. When the battery is fully charged, the capacity LED lights continuously and the battery enters standby mode.
3. When the product is in discharge mode, thanks to the inverter, you can use the battery power source for household appliances. The operation LED lights up and the capacity indicator shows the current battery level. When the battery is discharged to the final voltage, the output is automatically disconnected and the battery goes into standby operation.

4.2 Touch screen

By operating the touch screen, information about SOC (battery status), voltage, current, alarms and other parameters can be displayed in real time on the product's front panel.







4.3 Sleep and wake-up functions of the product

Lp.	Battery sleep conditions	Battery wake-up conditions
1	no activity (no charging, discharging and no communication) for 48 hours, after which the battery goes to sleep	
2	the voltage of individual cells falls below the set value for over~discharge protection (adjustable) or the total voltage falls below the set value for over~discharge protection (settable), the battery goes to to sleep mode after 10 minutes	external power supply (voltage 36 V-56.4 V), battery charging, reset button
3	the battery can be put into sleep mode on demand by means of a control (e.g. by computer)	

5. The most common faults and how to resolve them

No.	Symptoms	Reasons	Solution
1	no output when switched on	battery voltage is low over-discharge protection is activated	charge the battery
2	indicator light does not light up when switched on	BMS (Battery Management System) is in sleep mode	press reset button
3	low battery indicator	too low charging voltage	adjust the charging voltage and inverter voltage to the required parameters
4	short power supply time	the battery is not at maximum charge	check the charging parameters of the inverter, such as charging voltage and charging current
5	unstable output voltage after switching on	BMS (Battery Management System) disturbed	press reset button
6	communication failure RS~485/CAN	problem with communication line or address	check the DIP switch's address settings, ports and connections

6. List of items in the package

No.	Name	Quantity
1	main module	1 pcs.
2	communication cable	1 pcs.
3	SC50-8 cylindrical clamp	4 pcs.
4	M6*14 octagonal external screws	4 pcs.
5	EPO bridge	1 pcs.
6	cable cover	4 pcs.
7	concrete anchor	4 pcs.
8	wall mount	1 pcs.
9	certificate of conformity	1 pcs.

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Declaration of Conformity CE 01/2 CE

Manufacturer	Heckman Sp. z o.o. Kolumba 43/47, 02-288 Warsaw
Product	Energy storage
Type	WLFP51200A

Hereby declares that the products listed above comply with:

Directive 2014/30/EU - Immunity to Interference "Electromagnetic Compatibility Directive".

EN 61000-6-3:2007/A1:2011/AC:2012
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 61000-6-1:2007

Therefore, the aforementioned products are CE marked.

Chairman of the Board
Dominik Dakowicz

Warsaw, 14.02.2023

(places and date of issue)

(name, surname and signature of the authorized person)

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Warranty on battery storage system

Heckman energy storage system WLFP51200A

This limited warranty (hereinafter referred to as 'warranty') applies to Heckman lithium-iron-phosphate batteries from Heckman and accessories (hereinafter referred to as 'products') supplied by Heckman Sp. z o.o (hereinafter referred to as 'Heckman' or 'seller "') to the end user (hereinafter referred to as "purchaser ')) through an authorised dealer.

'). Objective

The primary purpose of this guarantee is to make clear the issues relating to product guarantee policy.

2. Warranty terms and conditions

2.') Warranty period

The warranty period is ')20 months provided that the product is registered on the manufacturer's website heckman.pl and provided that annual servicing is carried out by an authorised HECKMAN installer at a maximum of every ')2 months from the date of purchase.Notification of inspections must be made via the heckman.pl website. Failure to comply with these conditions limits the warranty to 24 months from the date of purchase.

2.2 Limitation of warranty coverage

Heckman's liability under this warranty is limited to replacement, repair, refund and indemnity. Replaced or repaired products are warranted for the remainder of the original performance warranty period.In no event shall the replacement or repair of a product justify the renewal of the performance warranty.

2.3 Exclusion of warranty

Damage to products caused by performing one of the following actions is not covered by this limited warranty:

- improper transport, storage, installation or use of improper cables by the purchaser;
- modification, alteration, disassembly, repair or replacement carried out by anyone other than an employee authorised by Heckman;
- treatment not in accordance with the official installation instructions;
- external factors, including abnormal physical or electrical loads (power surges, stroke, lightning, flood, fire, accidental damage, etc.);
- use of an incompatible inverter, rectifier or parts;
- lack of confirmation of installation/commissioning or confirmation of periodic inspection by an authorised Heckman installer.

2.4 Warranty claim

To avoid additional problems with the products, the purchaser should contact the installer directly for any warranty claims.

Information: the products are not protected against spontaneous discharge in switched-off mode.

3. Performance warranty (standard)

Heckman warrants and represents that the product will retain at least 60% of the nominal energy for a period of 10 years from the date of initial installation or the minimum energy capacity as per the table below (whichever comes first) when the battery system is operated under normal use in accordance with the specifications and instructions provided by Heckman.

The term 'nominal capacity' in this document means the initial capacity of the products. This information can be found on the label of the products. As a condition of a valid 10-year performance guarantee, the following requirements must be met:

Product name	Nominal energy	Energy efficiency
WLFP51200A	4,86 kWh	14,6 MWh

Performance measurement status:

- ambient temperature: 25~30℃;
- initial BMS battery temperature BMS: 25~30℃.

Charging/discharging method:

- charge: 60A(0,3)C;
- discharge: (0,2)CC/CV;
- current: (0,2)C: (20)A;
- measurement of voltage and current on the DC side of the battery.

4. Installation and periodic inspection

A prerequisite for recognition of the guarantee is that installation/commissioning and periodic inspections are carried out at intervals of no more than 12 months by an authorised Heckman installer, confirmed by entries on the inspection card. Failure to perform the periodic inspection is grounds for refusal of warranty recognition.

5. Out-of-warranty policy

For the repair of damage not caused by the vendor, Heckman will provide a chargeable service, which includes all costs, such as the cost of materials, labour, storage, transport, customs, examination and testing, mark-up, disposal if necessary).

6. Products/services parts

Products/service parts whose performance is equal to or greater than that of the defective products and guaranteed by Heckman may be used as new or refurbished.

In the event that the products are no longer available on the market, Heckman may, at its discretion, replace them with other products with the same functions and features or refund the remaining annually amortised value of the purchase price of the products during the performance guarantee period, as described below in the compensation plan. The purchase price referred to means the list price actually paid by the purchaser.

Compensation plan

CLASS I: 100% of the purchase price from the date of first installation to the 24th month;
CLASS II: 72% of the purchase price from the 25th to the 36th month;
CLASS III: 58% of the purchase price from 37 to 48 months;
CLASS IV: 44% of the purchase price from the 49th to the 60th month;
CLASS V: 30% of the purchase price from month 61 to 72;
CLASS VI: 16% of the purchase price from the 73rd to the 84th month;
CLASS VII: 6% of the purchase price from the 85th to 96th month;
CLASS VIII: 4% of the purchase price from month 97 to 108;
CLASS IX: 2% of the purchase price from month 109 to month 120.
No performance guarantee will be given from month 121 onwards.

7.Payment claims policy

Claims under this guarantee must be made to the authorised dealer
from whom the product was purchased. To be considered, a warranty claim must include the following information:

1. Original proof of purchase;
2. Description of the supposed fault(s) drawn up by an authorised service centre
3. The relevant product serial number and date of first installation.

Purchasers who are unable to contact the authorised dealer
from whom they purchased the product, should contact Heckman via the form: . 'Service Request', found on the Heckman website: www.heckman.pl.

8. Countries covered

This warranty applies only in the countries listed below, and Heckman shall not be liable for claims under this warranty brought or arising in countries other than those listed herein.
- Poland.

Inspection card

Installation site address:

Heckman serial number: Inverter

(make/model/serial number):

Installation date:

Date and signature of the authorized person

Authorized installer's stamp

12 months review: Date, signature and stamp of the authorized installer	24 month review: Date, signature and stamp of the authorized installer
36 month overview: Date, signature and stamp of the authorized installer	48 month review: Date, signature and stamp of the authorized installer
60 month review: Date, signature and stamp of the authorized installer	72 month review: Date, signature and stamp of the authorized installer
84 month review: Date, signature and stamp of the authorized installer	96 month overview: Date, signature and stamp of the authorized installer
108 month review: Date, signature and stamp of the authorized installer	Additional notes: Date, signature and stamp of the authorized installer

Service notes

Service notes

Service notes

Service notes

Service notes

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