



Li-LV LFP Battery Module  
**USER MANUAL**



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To secure the full 10-year product warranty, be sure to install the Stomherz Li-LV battery modules by qualified installers.

**Warning:** Read this entire document before installing or using Stomherz Li-LV LiFePO4 battery modules. Failure to do so or to follow any of the instructions or warnings in this document can result in electrical shock, serious injury, or death, or can damage Li-LV LiFePO4 battery module, potentially rendering it inoperable.



## PRODUCT SPECIFICATIONS

All specifications and descriptions contained in this document are verified to be accurate at the time of printing. However, because continuous improvement is a goal at Stomherz, we reserve the right to make product modifications at any time.

The images provided in this document are for demonstration purposes only. Depending on product version and market region, details may appear slightly different.

## ERRORS OR OMISSIONS

To communicate any inaccuracies or omissions in this manual, please send an email to : [info@stromherz.at](mailto:info@stromherz.at)



## ELECTRONIC DEVICE: DO NOT THROW AWAY

Proper disposal of batteries is required. Refer to your local codes for disposal requirements (ie. EC N 1013/2006 among European Union).



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# Important Safety Instructions

SAVE THESE IMPORTANT SAFETY INSTRUCTIONS. Stromherz Li-LV LiFePO4 battery module installation and repair instructions assume knowledge of high voltage electricity and should only be performed by Stromherz Certified Installers. Stromherz assumes no liability for injury or property damage due to repairs attempted by unqualified individuals or a failure to properly follow these instructions. These warnings and cautions must be followed when using Stromherz .

## SYMBOLS IN THIS DOCUMENT

This manual uses the following symbols to highlight important information:

 Warning	WARNING indicates a hazardous situation which, if not avoided, could result in injury or death.
 Caution	CAUTION indicates a hazardous situation which, if not avoided, could result in damage to the equipment.
Note	NOTE indicates an important step or tip that leads to best results, but is not safety or damage related.

## GENERAL INFORMATION



Warning: Read this entire document before installing or using Stromherz Li-LV battery. Failure to do so or to follow any of the instructions or warnings in this document can result in electrical shock, serious injury, or death, or can damage Stromherz Battery, potentially rendering it inoperable.



Warning: A battery can present a risk of electrical shock, fire, or explosion from vented gases. Observe proper precautions.



Warning: Stromherz Li-LV Battery installation must be carried out only by Stromherz Certified Installers, who have been trained in dealing with high voltage electricity.



Warning: Stromherz Li-LV battery is heavy and challenging to lift.



Warning: Use Stromherz Li-LV Battery only as directed.



Warning: Do not use Stromherz Li-LV Battery if it is defective, appears cracked, broken, or otherwise damaged, or fails to operate.



Warning: Before beginning the wiring portion of the installation, first power off the inverter and then open the AC and DC disconnect switches (if applicable for the installation).



Warning: Do not attempt to open, disassemble, repair, tamper with, or modify Stromherz Li-LV Battery. Stromherz Li-LV Battery is not user serviceable. LiFePO4 battery Cells in Stromherz Li-LV Battery are not replaceable. Contact the Stromherz Authorized Reseller who sold the Stromherz Li-LV Battery for any repairs.



Warning: Do not connect Stromherz Li-LV Battery to alternating current(AC) carrying conductors. Stromherz Li-LV Battery must be wired to either an inverter or a DC combiner panel that is then wired to an inverter. No other wiring configuration may be used.



Warning: Stromherz Li-LV Battery contains components, such as switches and relays, that can produce arcs or sparks.



Warning: To protect Stromherz Li-LV Battery and its components from damage when transporting, handle with care. Do not impact, pull, drag, or step on Stromherz Li-LV Battery. Do not subject Stromherz Li-LV Battery to any strong force. To help prevent damage, leave Stromherz Li-LV Battery in its shipping packaging until it is ready to be installed.



Warning: Do not insert foreign objects into any part of Stromherz Li-LV Battery.



Warning: Do not expose Stromherz Li-LV Battery or its components to direct flame.



Warning: Do not install Stromherz Li-LV Battery near heating equipment.



Warning: Do not immerse Stromherz Li-LV Battery or its components in water or other fluids.



Caution: Do not use cleaning solvents to clean Stromherz Li-LV Battery, or expose Stromherz Li-LV Battery to flammable or harsh chemicals or vapors.



Caution: Do not use fluids, parts, or accessories other than those specified in this manual, including use of non-genuine Stromherz Li-LV parts or accessories, or parts or accessories not purchased directly from Stromherz or a Stromherz -certified party.



Caution: Do not place Stromherz Li-LV Battery in a storage condition for more than one (1) month, or permit the electrical feed on the Stromherz Li-LV Battery to be severed for more than one (1) month, without placing Stromherz Li-LV Battery into a storage condition in accordance with Stromherz's storage specifications.



Caution: Do not paint any part of Stromherz Li-LV Battery, including any internal or external components such as the exterior shell or casing.



Caution: Do not connect Stromherz Li-LV Battery directly to photovoltaic (PV) solar wiring.



Caution: When installing Stromherz Li-LV Battery in a garage or near vehicles, keep it out of the driving path. If possible, install the Stromherz Li-LV Battery on a side wall and/or above the height of vehicle bumpers.

## ENVIRONMENTAL CONDITIONS



Warning: Install Stromherz Li-LV Battery at a height that prevents damage from flooding.



Warning: Operating or storing Stromherz Li-LV Battery in temperatures outside its specified range might cause damage to Li-LV Battery.



Warning: Do not expose the Stromherz Li-LV Battery to ambient temperatures above 60°C (140°F) or below -30°C (-22°F).



Caution: Ensure that no water sources are above or near Stromherz Li-LV Battery, including downspouts, sprinklers, or faucets.

# Specifications



2.5KWH FREE STAND  
LIFEPO4 BATTERY MODULE

## 2.5KWH FREE STAND LIFEPO4 BATTERY MODULE

Total Energy [kWh]	2.5	5.0
Useable Energy [kWh]	2.25	4.5
Nominal Voltage [V]	51.2	51.2
Nominal Capacity [Ah]	50	100
Operating Voltage Range [V]	40~58.4	40~58.4
Nominal Charge Current [A]	50	100
Nominal Discharge Current [A]	50	100
Peak Discharge Current [A]	60	110
Calendar Life [Year]	20 years @25°C, 15 years @35°C, 10 years @45°C	
Depth of Discharge [%]	90	90
Data Communication	CAN/RS485	CAN/RS485
Temperature	0-45°C Charge, -20~55°C Discharge,	
	-10~45°C Stock Storage	
Enclosure Protection Rating	IP 65	IP 65
DC Isolator	Integrated	Integrated
Certificate	UI1642/ UI1973/ IEC62619	/ IEC60950/ IEC60068/ CE
Scalability Range/Mode	Max. 5 Modules Parallel	Max. 5 Modules Parallel
Installation Mode	Free Stand	Free Stand
Dimensions [W*H*D]	152.6*483*339mm	308*471*278mm
Weight	30KG	60KG
Warranty	10,000 cycles at 90% DOD, or 10 years(optional 6000 cycles)	



2.5KWH/5KWH WALL  
MOUNTED LIFEPO4 BATTERY  
MODULE

## 2.5KWH/5KWH WALL MOUNTED LIFEPO4 BATTERY MODULE

Total Energy [kWh]	2.5	5.0
Useable Energy [kWh]	2.25	4.5
Nominal Voltage [V]	51.2	51.2
Nominal Capacity [Ah]	50	100
Operating Voltage Range [V]	40~58.4	40~58.4
Nominal Charge Current [A]	50	100
Nominal Discharge Current [A]	50	100
Peak Discharge Current [A]	60	110
Calendar Life [Year]	20 years @25°C, 15 years @35°C, 10 years @45°C	
Depth of Discharge [%]	90	90
Data Communication	CAN/RS485	CAN/RS485
Temperature	0-45°C Charge, -20~55°C Discharge,	
	-10~45°C Stock Storage	
Enclosure Protection Rating	IP 65	IP 65
DC Isolator	Integrated	Integrated
Certificate	UI1642/ UI1973/ IEC62619	/ IEC60950/ IEC60068/ CE
Scalability Range/Mode	Max. 5 Modules Parallel	Max. 5 Modules Parallel
Installation Mode	Wall Mounted	Wall Mounted
Dimensions [W*H*D]	414*470*185mm	414*750*185mm
Weight	30KG	60KG
Warranty	10,000 cycles at 90% DOD, or 10 years(optional 6000 cycles)	

\*Compatible inverter brands: Srtomherz/Wattsonic/ SMA SunnyIsland/ Victron/ Imeon/ Voltronic/ SolaX/ GoodWe/ SofarSolar/ Solis/ Studer  
 \*Stromherz reserves the right to modify the technical datasheet and appearance of the product in the user manual without prior advice to the users

# Standard Packing List



Li-LV LFP Battery



Battery Backsheet



Battery<-->Inverter



Battery<-->Inverter Rj45  
Communication Cable



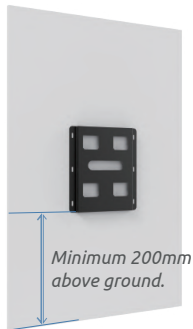
M6 Expansion Screws



COM Resistor

# Mechanical Installation

## Single battery installation

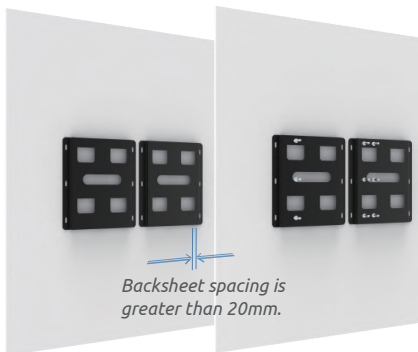


Step-1, Confirm the exact mounting position of battery backsheet.



Step-2, Hanging on the battery module to the mounted battery backsheet.

## Multiple battery installation



Step-1, Confirm the exact mounting position of battery backsheet.

Please use M screws to fix backsheet on according to



Step-2, Hanging on the battery module to the mounted battery backsheets.



# Electric Connection

## Top connection interface

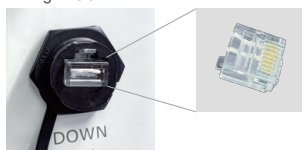
- ① Battery<-->Inverter Power Cables(+)
- ② Battery<-->Inverter Power Cables(-)
- ③ Communication cables(up)
- ④ Communication cables(down) Battery
- ⑤ Reset Button
- ⑥ DC Isolator
- ⑦ Grounding Point



- ⑧ Communication cable

- ⑨ COM Resistor

1.Plug in COM Resistor



2.Put on a protective cap



### Step-3, Cables Connection and COM Resistor

Connect battery power cables and communication cables as the pictures shown below.

Then please plug in the COM resistor to the last communication interface, which is open.

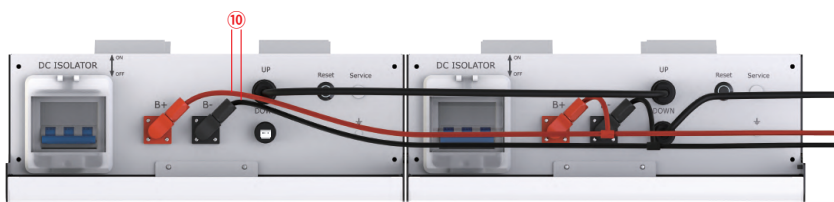
Please noted that no matter one single battery installation or multi batteries parallel connection, COM resistor is mandatory required to strength the CAN Bus signal.



- ⑩ Stromherz standard parallel kits Maximum withstand current is 100A.If you have a larger load demand, you can choose to configure the DC Combiner box.

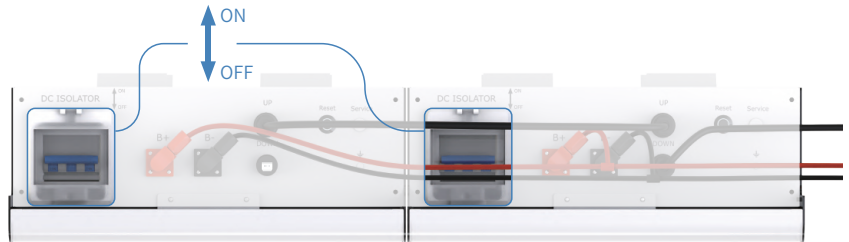


DC Combiner box

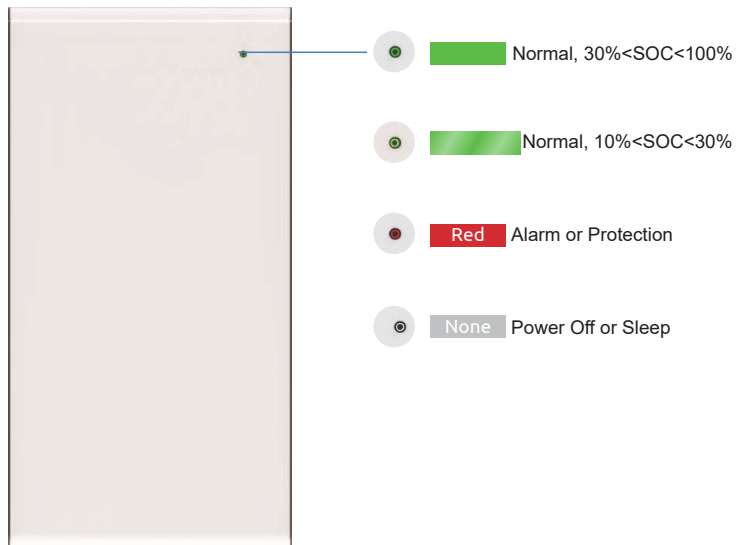


# Start the Battery Array

Step-4, please pull on the DC Isolator



The indicator light is on, showing green, and the machine is on normally.



# System Setting

## NORMAL OPERATION

During normal operation, if Li-LV LFP Battery Module are installed correctly, the inverter and battery will start communication immediately, then begin to process power commands. See the inverter manual for further configuration instructions.



Warning: Do not operate Li-LV LFP Battery Module unless all covers are in place.



Warning: Do not disconnect anything from or add anything to Li-LV LFP Battery Module.



Caution: Do not try to communicate with Li-LV LFP Battery Module using third party tools or diagnostics Li-LV LFP Battery Module and the inverter.



Caution: Do not lean on, stack anything on top of, or hang anything from Li-LV LFP Battery Module or the conduit.

## LI-LV LFP BATTERY MODULE CARE

Keep the top edge of Li-LV LFP Battery Module clear of articles to maintain optimal airflow.

To clean Li-LV LFP Battery Module, use a soft, lint-free cloth. The cloth can be dampened with only water if needed. It should not be dripping.



Caution: Do not use cleaning solvents to clean Li-LV LFP Battery Module.



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\*Stromherz reserves the right to modify the technical datasheet and appearance of the product in the user manual without prior advice to the users.