SORYQEX Battery Storage Co., Ltd.

5kWh Rack battery pack

Installation Manual

2kW DC / 5kWh / Approx. 2 Hours at Rated Power / 2U Rack Module

Product path: /5kwh-battery/
Install type: Rack-Mounted | Voltage class: —
Source hub: /installation-manuals/

1. Overview

SORYQEX 5.12kWh LiFePO4 home battery, 51.2V, wall or floor. Parallel up to 10 units after the inverter is confirmed.

Qualified personnel only. Follow local electrical codes. Confirm model, voltage, communication, breaker, cable size, and clearance for THIS exact product before installation.

2. Model Snapshot

Item	Value
Model	5kWh Rack battery pack
Installation format	Rack-Mounted
Voltage class	—
Product page	/5kwh-battery/
Capacity / Power	2kW DC
Voltage / Chemistry	5kWh
Use Case	Approx. 2 Hours at Rated Power
Install / Format	2U Rack Module

3. Before You Install

- Confirm the exact model name matches the packing label and datasheet
- Check installation space, wall/floor load capacity, and service clearance
- Confirm inverter / PCS compatibility (voltage, protocol, charge limits)
- Select breaker and cable size for this battery + inverter combination
- Check indoor/outdoor suitability and IP / enclosure rating for the site
- Prepare grounding, isolation, and emergency shutoff per local code

4. Installation Steps (General)

- Power down related AC/DC sources and verify zero energy where required
- Unpack and inspect for shipping damage; keep packing list for warranty
- Mount or place the unit per the stated format: Rack-Mounted
- Install protective earth / PE before energizing power circuits
- Connect DC / expansion / communication cables with correct polarity and torque
- Configure BMS / CAN / RS485 / WiFi settings to match the inverter protocol
- Power up in the sequence required by the host inverter / ESS controller
- Verify SOC, voltage, communication, and a low-load test before full operation

5. Wiring & Protection Checklist

- Do not size cables from a generic chart - use this model + inverter pair
- Keep DC polarity correct; reverse polarity can damage BMS / inverter
- Separate signal and power routing where required by the system design
- Use only approved connectors / expansion cables for parallel or host packs
- Never bypass BMS protection, fuses, or manufacturer interlocks

6. Notes From Product Page

- 5.12kWh LiFePO4 pack for home solar storage and backup. Wall and floor use the same battery. Electrical ratings are in the table below.
- 5.12kWh · Wall / Floor
- Installation is wall or floor. It is the same 51.2V pack either way.
- Check Inverter Compatibility
- Choose this model when the site needs about 5kWh. Nominal energy is 5.12kWh, and wall or floor is only the mounting method.
- The hours below are 5.12kWh divided by the connected load. Keep each pack within 3.84kW. Inverter losses are not included in this table.
- Inverter & Solar Compatibility
- Confirm the inverter before ordering. Do not match this pack by capacity alone.
- The inverter must accept a 51.2V battery
- The inverter must stay inside 44.8–57.6V DC

7. Safety

- LiFePO4 systems still require electrical safety practice and fire-access clearance
- Do not open sealed packs, short terminals, crush, or expose to immersion
- Stop use if swelling, abnormal heat, odor, leakage, or persistent faults appear
- Follow transport and storage rules for lithium battery products

8. FAQ

Q: Why does the name say 5kWh when nominal energy is 5.12kWh?
A: This model is named 5kWh. The nominal energy rating is 5.12kWh.

Q: Is the wall pack a different battery from the floor pack?
A: No. Wall and floor are two ways to install the same 51.2V battery.

Q: How long does backup runtime last?
A: Nominal battery-side runtime is 5.12kWh divided by the connected load. A 500W load is about 10.24 hours. A 1000W load is about 5.12 hours. Inverter losses are not included.

Q: What loads can this model run?
A: Lights, a Wi-Fi router, a refrigerator, a laptop, a fan, a TV, and small appliances, when the total stays within 3.84kW per pack and within the inverter rating.

Q: Can it work with my inverter?
A: Only if the inverter accepts 51.2V, stays inside 44.8–57.6V DC, and uses CAN, RS485, or RS232. Send the inverter model with the quote request.

Q: Can the system be expanded?
A: Yes. Up to 10 units in parallel, from 5.12kWh to 51.20kWh. Confirm the inverter before paralleling.

Q: Should I buy this pack or the 10kWh model?
A: Use this pack for essential backup around 5.12kWh. Choose the 10kWh model, or parallel more than one of these units, when daily backup needs more than that.

9. Support

Download hub: /installation-manuals/
Compatibility check: /check-inverter-compatibility/
Quote / engineering: /get-a-quote/
Always confirm final breaker, cable, and protocol values on the latest datasheet for this model.