SORYQEX Battery Storage Co., Ltd.

20kWh Battery

Installation Manual

20.48kWh / 51.2V DC / Floor-Standing with Wheels / CAN / RS485 / Bluetooth / WiFi

Product path: /20kwh-battery/
Install type: Floor-Standing | Voltage class: Low Voltage
Source hub: /installation-manuals/

1. Overview

20kWh Battery — 51.2V 400Ah LiFePO4 for home solar storage, daily self-consumption and backup power. SORYQEX LV battery pack.

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	20kWh Battery
Installation format	Floor-Standing
Voltage class	Low Voltage
Product page	/20kwh-battery/
Capacity / Power	20.48kWh
Voltage / Chemistry	51.2V DC
Use Case	Floor-Standing with Wheels
Install / Format	CAN
Note	RS485
Extra	Bluetooth

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: Floor-Standing
- 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

- Floor-Standing with Wheels
- 20.48kWh · Floor-Standing with Wheels
- The wheeled floor-standing pack can run as one unit or expand in parallel when more storage is needed.
- Shows which loads this pack can support with a matched inverter.
- Conditional — inverter sizing and startup-current review
- Shows voltage, communication and power match points with the inverter.
- Battery voltage range
- No — comes from matched inverter
- Installation, Protection & Expansion
- Installation and protection parameters for this model.

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: Is this a 20kWh LiFePO4 pack?
A: Yes. Nameplate energy is 20.48kWh with LiFePO4 chemistry.

Q: Is the voltage 48V or 51.2V?
A: Nominal voltage is 51.2V DC for 48V-class low-voltage inverter systems, with a 44–57.6V operating range.

Q: What capacity and communication does it use?
A: Rated capacity is 400Ah. Communication includes CAN / RS485 / Bluetooth / WiFi.

Q: How should backup runtime be estimated?
A: Use 20.48kWh ÷ connected load as a nominal battery-side estimate, then confirm inverter limits and load schedule.

Q: What loads can it support?
A: Selected home and light commercial loads when inverter size, startup current and total power stay within system limits.

Q: Can it work with my inverter?
A: It works with compatible low-voltage hybrid inverters that support 51.2V platforms, the 44–57.6V range and matching communication.

Q: Can the system be expanded?
A: Yes. Parallel support is up to 18 units, subject to inverter and system design.

Q: Who should choose this 20kWh battery?
A: Choose it for home backup or light commercial storage when you need more capacity than a small wall pack, with matched inverter voltage and communication.

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.