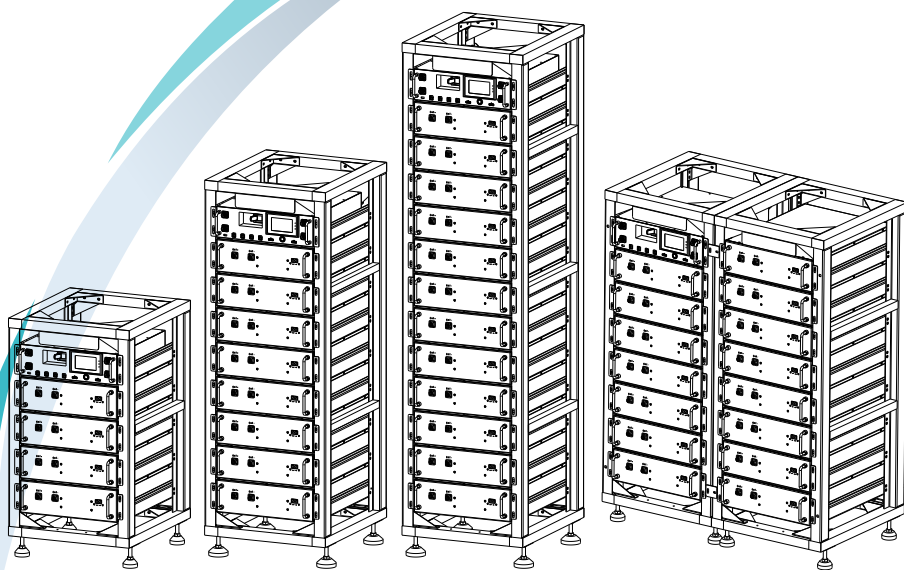


Vertically Stacked Energy Storage Battery Pack

20KWH/40KWH/60KWH/77KWH



USER MANUAL

Please read this manual carefully before installing your set
and retain it for future reference.

► Precautions For Use

Lithium battery energy storage systems are often composed of hundreds or even more batteries connected in series and parallel, and the voltage is often hundreds to thousands of volts.

During installation, commissioning and use, safety protection measures must be taken in accordance with relevant safety regulations to avoid the occurrence of safety accidents.

Prohibited Matters	► There is high voltage inside the energy storage system, and it is strictly forbidden to open the chassis for disassembly and maintenance without authorization by the company or the company's authorized technicians, otherwise there is a possibility of electric shock, and the warranty right will be lost.
	► It is strictly forbidden to overlap any wire or connector in the BMS on the positive and negative poles of the battery, otherwise there may be a risk of short circuit and damage to the circuit board.
	► It is strictly forbidden to connect the slave BMU when the main control BCU is powered on to avoid possible damage to the BMS.
	► It is strictly forbidden to be close to a water source or fire source to avoid the battery from catching fire due to short circuit or overheating.
Installation precautions	► The tools used by the installation and commissioning personnel shall be insulated. ► During installation, commissioning and maintenance, it is necessary to wear insulated rubber gloves, goggles and insulated rubber boots as appropriate to avoid safety accidents as much as possible. ► If the metal generated during installation, commissioning and maintenance falls into the battery room, please be sure to use an insulating tool to remove it, and do not leave sundries. ► The master-slave CAN1 communicates, and a 120R termination resistor needs to be added between the CANH and the CANL of the last slave BMU. ► For BCU parallelism, 120R termination resistors need to be added between the CANH and CALL of the first and last BCUs.
Safety Precautions	► When maintenance is required, the main circuit breaker must be disconnected to cut the connection of the battery pack to the PCS DC bus.
	► According to the different needs of the project, the parameters such as the charge and discharge current and charge and discharge voltage of the battery management system have been set during the initial installation and commissioning, and the parameters shall not be changed without authorization, otherwise the battery life may be shortened, and more serious problems may be caused by the battery.
	► In case of fire around the storage cabinet, be sure to use a dry chemical fire extinguisher or fire sand to extinguish the fire. Extinguishing a fire with a liquid may result in an electric shock. If the system is not in use for a long time, be sure to disconnect the main circuit breaker of the battery cabinet.
	► Try to avoid long-term use in the following work environments: ● Places where there is strong vibration or susceptibility to impact beyond the temperature or humidity range specified in the specification. ● Places exposed to direct sunlight or near heat sources. ● There are dust, strong corrosive substances, flammable and explosive substances, and high salt spray places.

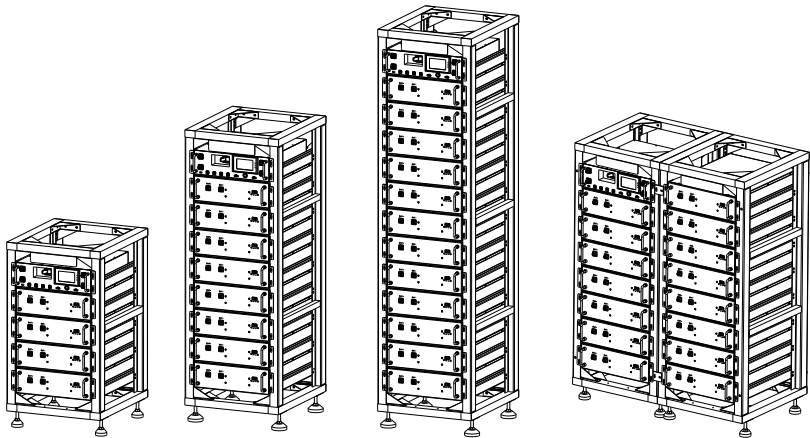
Thank You For Choosing Our Product.

- For any questions, free to call or email us any time.
- Please refer to the actual product If the diagrams provided shows a slight difference.
- Before using the product, please read the following precautions carefully to avoid damage or errors.

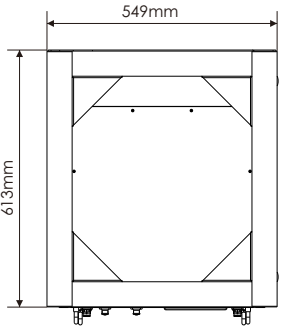
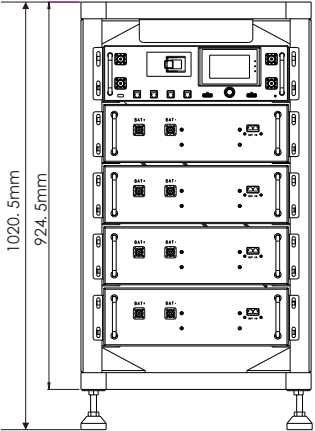
► Product Features

The system consists of rack-mounted battery modules, each with a capacity of 5.12kWh. Multiple modules can be connected in series and parallel to achieve the required storage capacity, and with its modular and scalable architecture, it offers flexible capacity from 20.48kWh to 76.8kWh. Standardized 3U enclosure design for easy installation and maintenance.

 Inverter interface protection: Over voltage, Over current, External Short Circuit	 Battery Protection: Internal Short Circuit, Over voltage, over current, over temp	 LiFePO4: Higher safe performance and longer cycle life	 Aerosol Fire Extinguishing System
 Flexible Installation: Stack-Mounted	 Wide Compatibility: Compatible with leading inverter brands	 High Scalability	 Long Warranty: 5 Years

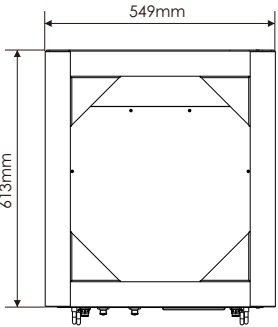
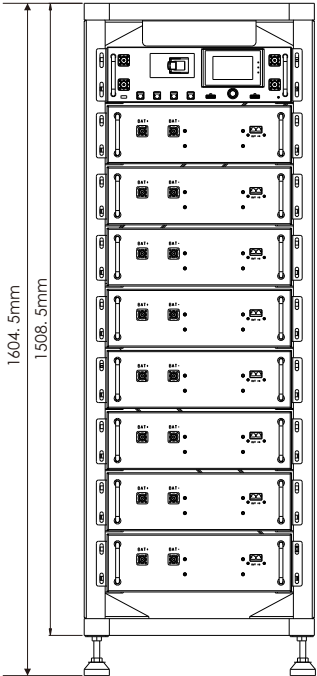


► Product Size



204.8V/20KWH

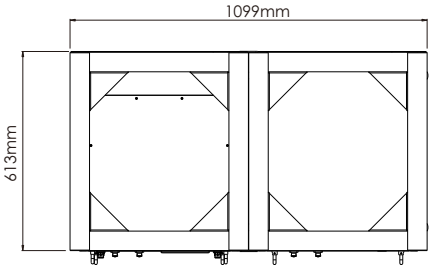
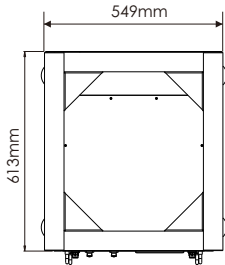
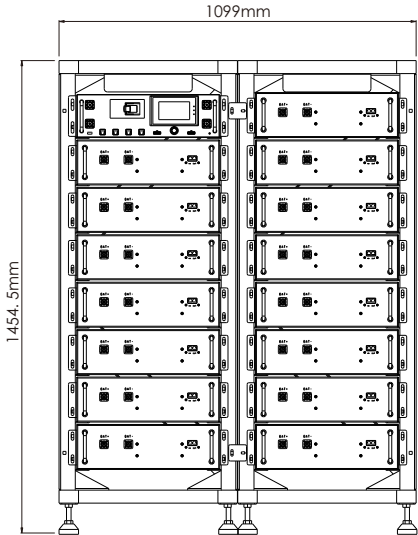
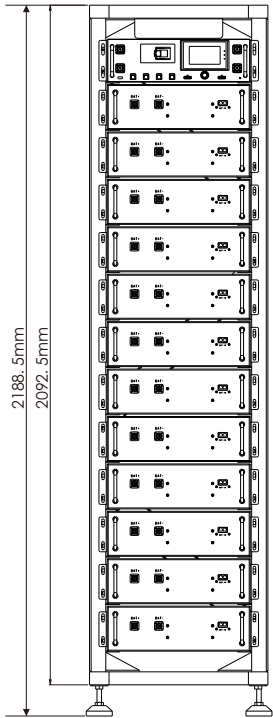
DQ2910A20-01



409.6V/40KWH

DQ2910B40-01

► Product Size



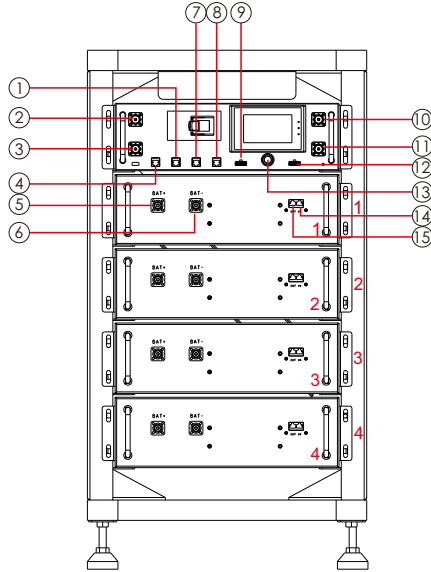
614.4V/60KWH

DQ2910C60-01

768V/77KWH

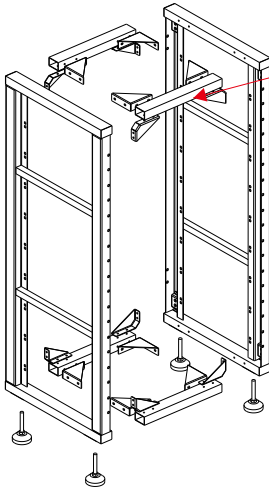
DQ2910D77-01

► Panel Indication

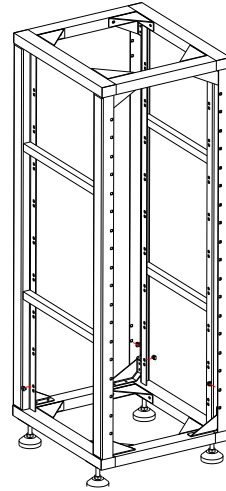


Item	Model
1	Parallel Interface Out
2	B+ Terminal
3	B- Terminal
4	Parallel Interface In
5	BAT+
6	BAT-
7	Upper Computer Communication Interface
8	Pcs Communication Interface
9	Dry Contact Port
10	P+ Terminal
11	P-terminal
12	Link Port
13	Push Button Switch
14	Link Port In
15	Link Port Out

► Installation Instructions

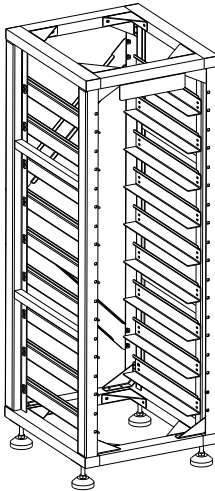


Note: There are two more teeth in the middle of this connecting tube

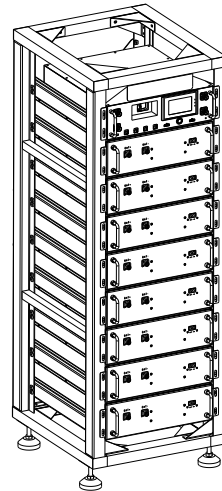


First, assemble the left frame, right frame, connecting tube, fixed connecting plate, and foot cup to stand upright

All square holes are fitted with M6 snap-on nuts



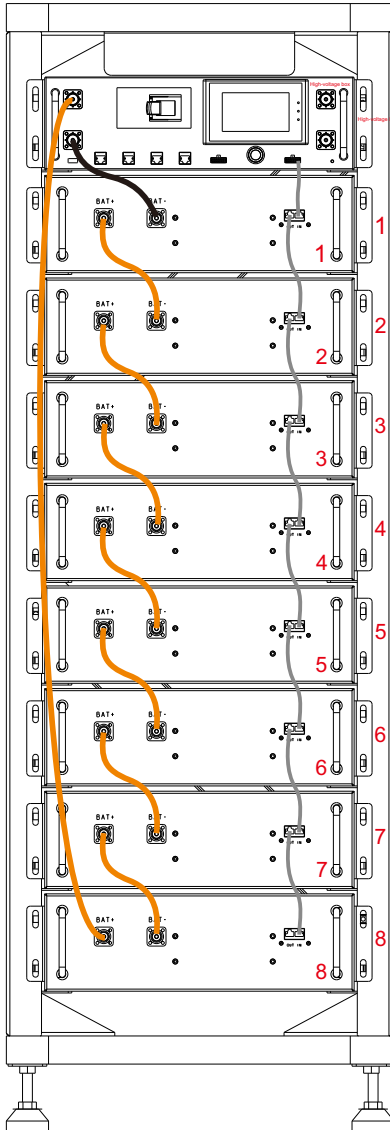
Lock all the remaining hardware fittings to the stand



Finally, the battery and the high voltage are loaded into the stand

► Installation Instructions

Wiring diagram:



Caution

Batteries should be assembled in the order of the serial numbers on their frames, and the order must not be changed.

► Technical Parameters

Model	DQ2910A20-01	DQ2910B40-01	DQ2910C60-01	DQ2910D77-01
Battery Type	LiFePO4			
Module Energy	5.12KWh			
Single Module Nominal Voltage	51.2V			
Module Capacity	100AH			
Number of Battery Modules (Optional)	4	8	12	15
System Energy	20.48kWh	40.96kWh	61.44kWh	76.8kWh
System Nominal Voltage	204.8V	409.6V	614.4V	768V
Charging Cut-off Voltage	230.4V	460.8V	691.2V	865V
Discharging Cut-off Voltage	179.2V	358.4V	537.6V	672V
Max. Cont. Charging/Discharging Current	100A			
Max. Instantaneous Charge/Discharge Current	100A			
Depth of Discharge(DOD)	≥95%			
Display type	LED+LCD(Touch)			
Protection Level	IP21			
Operating Temperature Range	Charge:0~+55°C/Discharge:-20°C~+55°C			
Storage Temperature Range	0°C~+35°C			
Humidity	5%~95%			
Altitude	≤2000m			
Cycle Life	≥4000 Cycles			
Installation	Rack-Mounting			
Protection	Built-in smart BMS, Breaker			
Communication Port	RS485/CAN			
Dimension (W*D*H,mm)	610.5*549*1020	610.5*549*1604	610.5*549*2188	1099*610.5*1454
Warranty Period	5 Year			

- 1 DC Usable Energy, test conditions: 90% DOD, 1C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
- 2 The current is affected by temperature and SOC.
- 3 The warranty is due whichever reached first of warranty period or life cycle power.

Warranty Card

CUSTOMER Information

*Contact Name _____
*Phone Number _____ *Email _____
Company Name _____
*Address _____
*State _____ Zip Code _____

PRODUCT Information

*Module Type _____
*Serial Number _____
*Purchase Date _____
*Faulty Description _____

- | | | | |
|----------------------------|-----|----|------|
| 1) Can the battery boot? | Yes | or | No ? |
| 2) Can battery charged? | Yes | or | No ? |
| 3) Can battery discharged? | Yes | or | No? |
| 4) Red light on? | Yes | or | No? |
| 5) Running light on? | Yes | or | No? |

INSTALLER Information

*Installer Name _____
Staff Number _____
*Installing Date _____

Please fill the form carefully, and the items marked with “*” are necessary, Thank you!

*Customer Signature _____ *Provider Signature _____
*Date _____