



SOLINTEG C&I Battery Introduction

EBR-A Series

V 1.0

2024/8/8

www.solinteg.com

Brief Introduction

High-voltage LiFePO4 Battery

EBR-A series is a convenient, safe, efficient high-voltage LiFePO4 battery module, featuring high performance, reliability, and eco-friendliness.

Intelligent BMS

The integrated Battery Management System (BMS) provides comprehensive protection against over-discharge, overcharge, over-current, and extreme temperatures. It automatically manages charge and discharge states while balancing the current and voltage of each cell.

Functionalities for C&I Application

EBR-A series is a storage battery system designed for C&I applications. It features a 100A charge/discharge current, supports up to 8 battery clusters in parallel, expanding the storage capacity to 601.44kWh, which makes it the ideal choice for your energy storage needs.

Excellent Module Specifications

Module Capacity
105Ah

Module Energy
5.37kWh

Nominal Voltage
51.2V



Highlights

Flexible Combination & Matching

Support 6-14 modules connected in one cluster

Great Voltage Adaptability

307.2 - 716.8V battery voltage range



Powerful Parallel Connection Functionality

Up to 8 clusters connected in parallel with Paraller Box

Various Capacity Options

Providing 32.2 - 601.44kWh capacity range with up to 100A charging/discharging current

Long Lifespan with 10-year Warranty

Support up to 240MWh throughput on 75kWh*, or enjoying a 10-year warranty and after-sales services

Cell-level Detection

cell-level protection and passive equalization technology for precise cell status

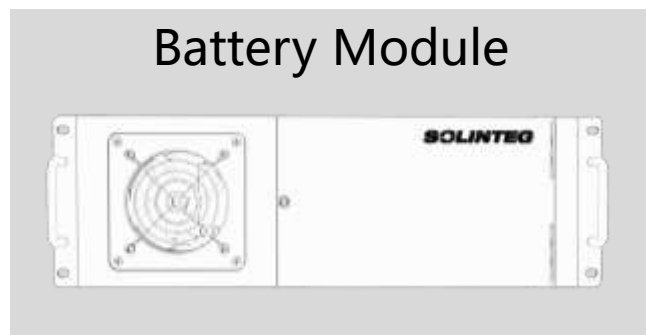
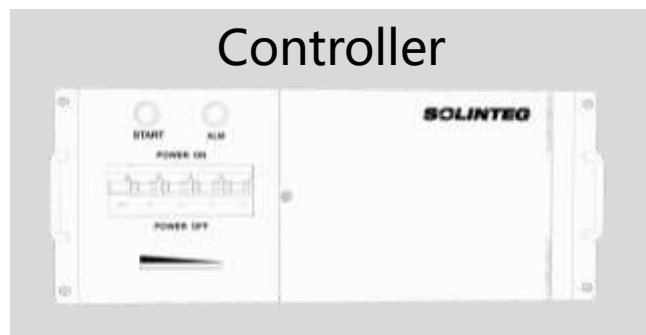
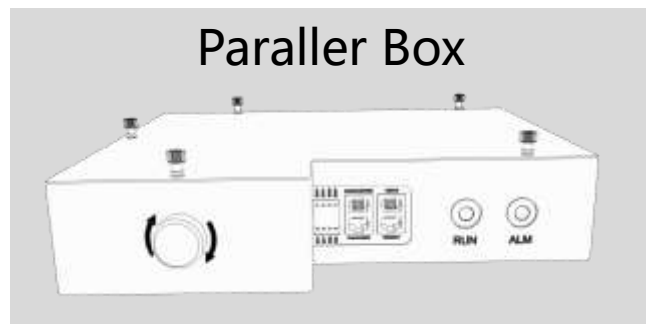
Remote Configuration

Remote settings and maintenance through Solinteg IntegHub



*For Single cluster, reach at least an aggregate energy throughput of energy of system (kWh) * 3.2 MWh. For Multi-clusters, support energy of system (kWh) * 3.2 * 0.98 MWh.

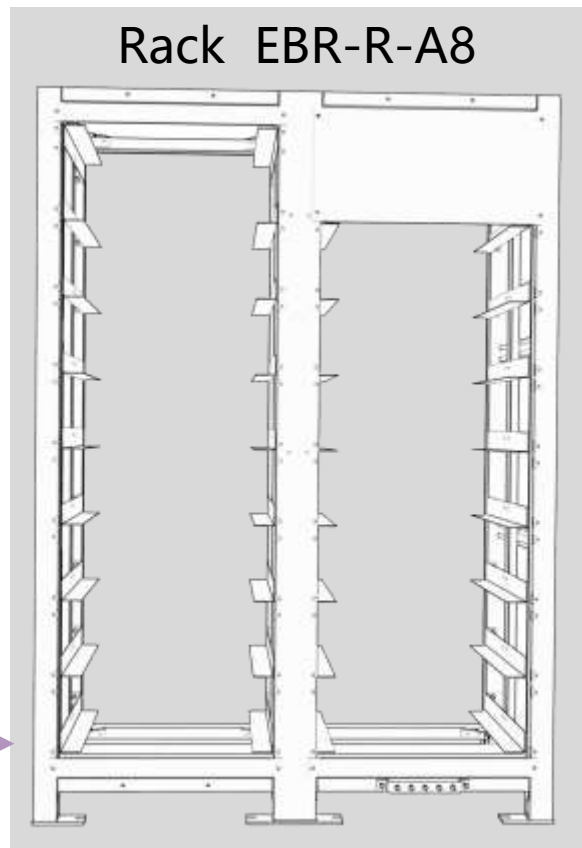
Components & Appearance



Due to the startup voltage (250 VDC) of Controller, it is recommended to use starting from 6 battery modules.



Different numbers of battery modules will utilize different types of rack.

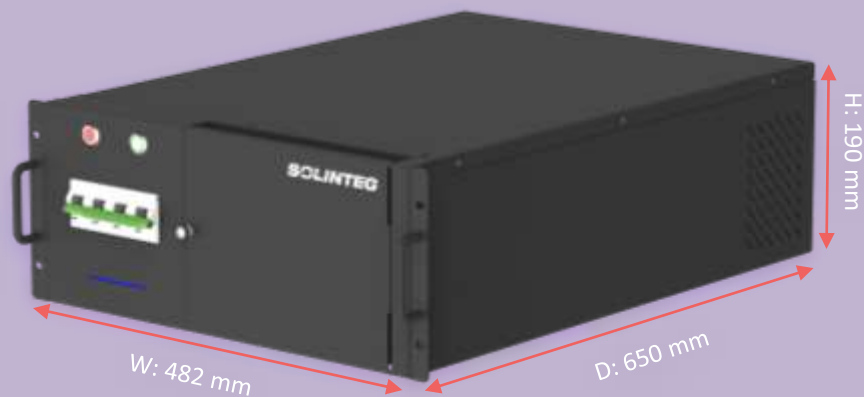


Components & Appearance

Controller: EBR-C-A



Weight: 23kg



Paraller Box

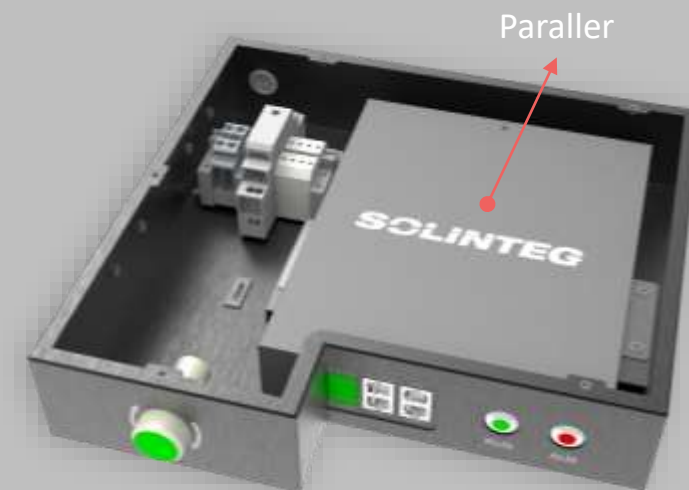


Weight: 6kg

Battery Module: EBR-B5K3-A



Weight: 49kg



System Parameter

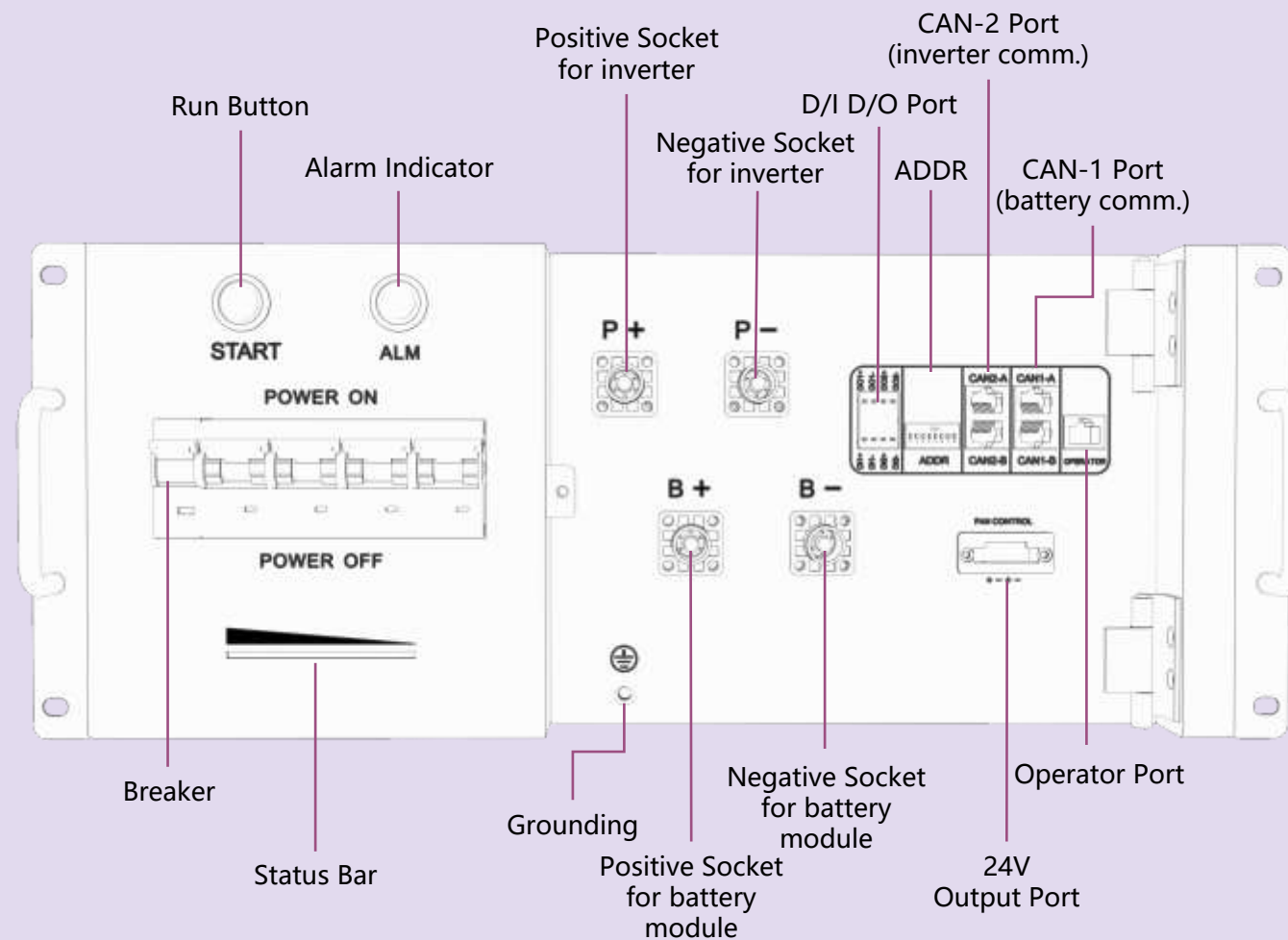
	EBR-S32K-A	EBR-S37K-A	EBR-S42K-A	EBR-S48K-A	EBR-S53K-A	EBR-S59K-A	EBR-S64K-A	EBR-S69K-A	EBR-S75K-A	E: Extender B: Battery R: Rack S: Stackable K:kWh A: A Series
Module Number	6	7	8	9	10	11	12	13	14	Number of battery pack
Nominal Energy (kWh)	32.22	37.59	42.96	48.33	53.7	59.07	64.44	69.81	75.18	Storage energy of the rack. One pack energy is 5.37kWh
Nominal Capacity (Ah)	105									Battery capacity, depend on the battery cell, usually unchanged.
Nominal Voltage(V)	307.2	358.4	409.6	460.8	512	563.2	614.4	665.6	716.8	The rated voltage of the battery rack. One pack voltage is 51.2V
Voltage Range (V)	279 - 350.4	325.5 - 408.8	372 - 467.2	418.5 - 525.6	465 - 584	511.5 - 642.4	558 - 700.8	604.5 - 759.2	651 - 817.6	The operating voltage of whole battery
Max. Charge/Discharge Current (A)	100 / 100									1C charge/discharge rate, it takes about 1 hour to fully charge or discharge.
Throughput(MWh)	Energy of system (kWh) * 3.2									Performance Warranty that the battery reaches at least an aggregate energy throughput
Working Temperature	0~55 (Charge) / -10~55 (Discharge)									The environmental temperature when battery charging and discharging
Weight (kg)	377	426	496	545	594	643	719	768	817	Includes the weight of the battery pack, controller, and rack.
Dimension[W*D*H] (mm)	554 * 662 * 1526		1092 * 662 * 1206				1092 * 662 * 1526			Different numbers of batteries use different types of racks, which leads to variations in size.
Communication	CAN / RS232									The communication method between inverter or battery modules
Protection Degree	IP21									Recommended for indoor installation

Controller

Due to the controller's startup voltage of 250V, it is recommended to use at least 6 battery modules. If 5 modules are chosen, the batteries should be set to a lower depth of discharge (DOD) to ensure the battery voltage does not drop below 250V.

Controller: EBR-C-A

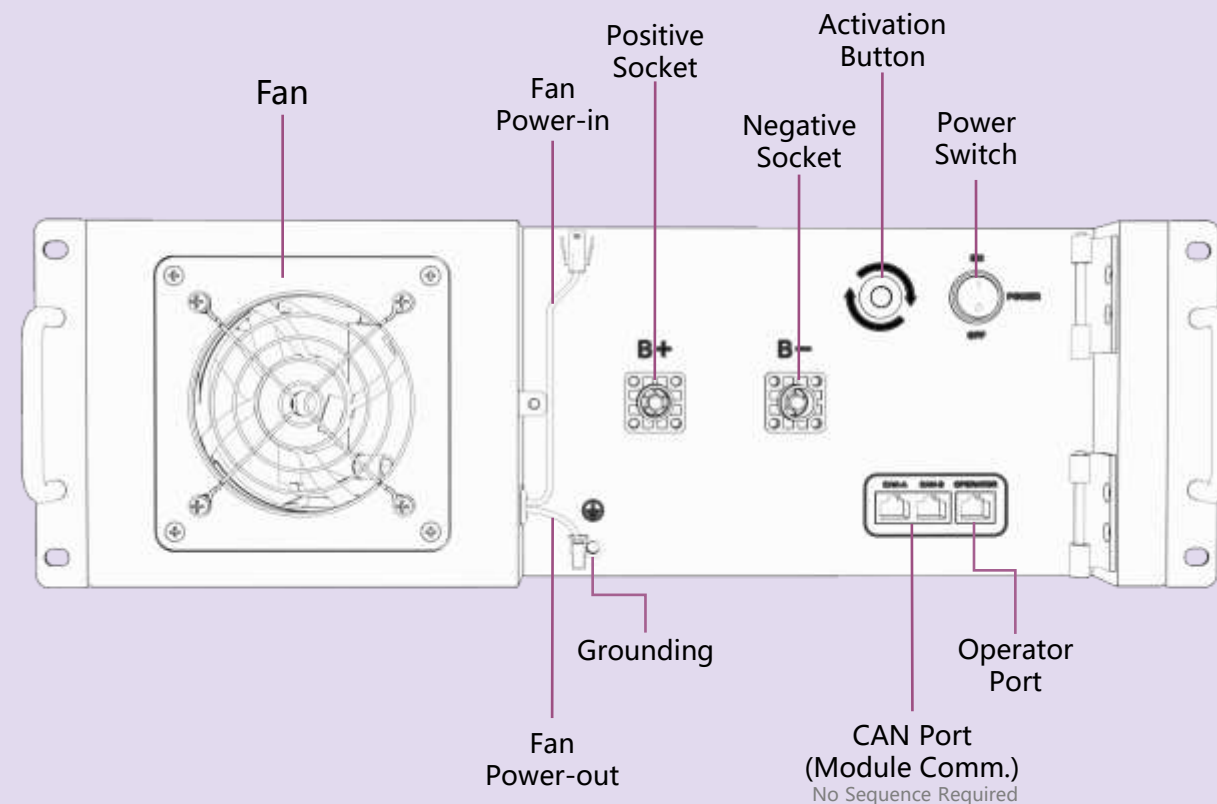
Operation Voltage(Vdc)	250 - 1000
Max. Charge/Discharge Current(A)	100/100
Communication	CAN/RS232
Weight(kg)	23
Dimension[D*W*H](mm)	650 * 482 * 190
Protection Degree	IP21
Operation Temp.Range [°C]	-10~55



Battery Module

Battery Module: EBR-B5K3-A

Nominal Energy (kWh)	5.37
Usable Energy (kWh)	4.83
Nominal Capacity (Ah)	105
Nominal Voltage (V)	51.2
Voltage Range (V)	46.5-58.4
Max.Charge/Discharge Current(A)	100/100
Weight (kg)	49
Dimension[D*W*H](mm)	650*482*150
Protection Degree	IP21
Operation Temp.Range [°C]	0~55(Charge)/-10~55(Discharge)
Communication	CAN /RS232
Cooling	Ventilation with Intelligent Fan

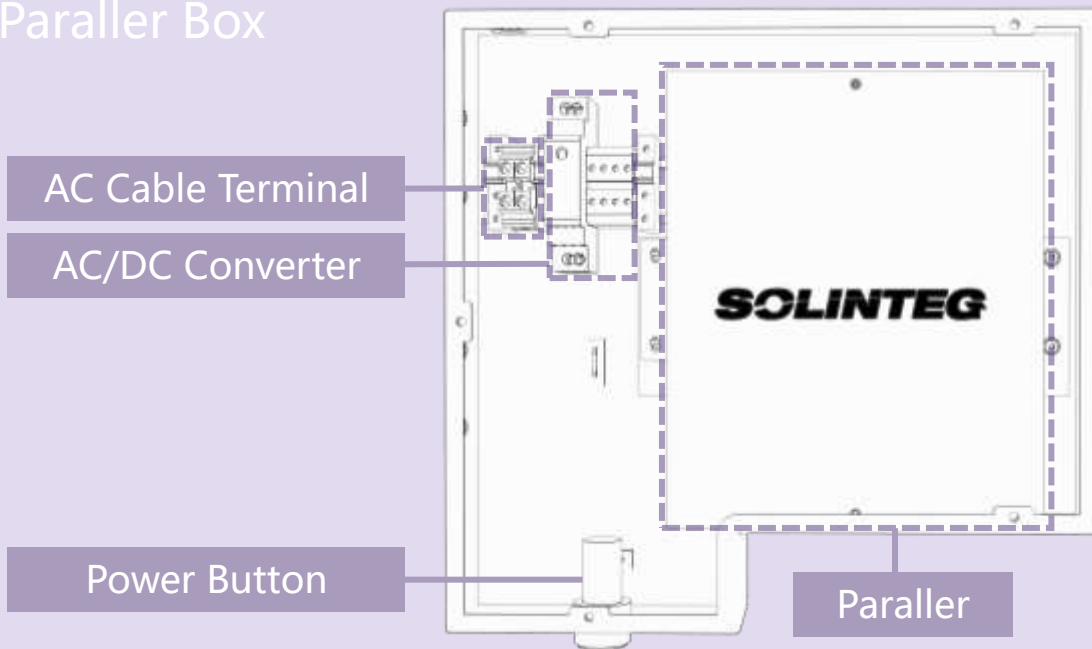


Paraller Box & Paraller



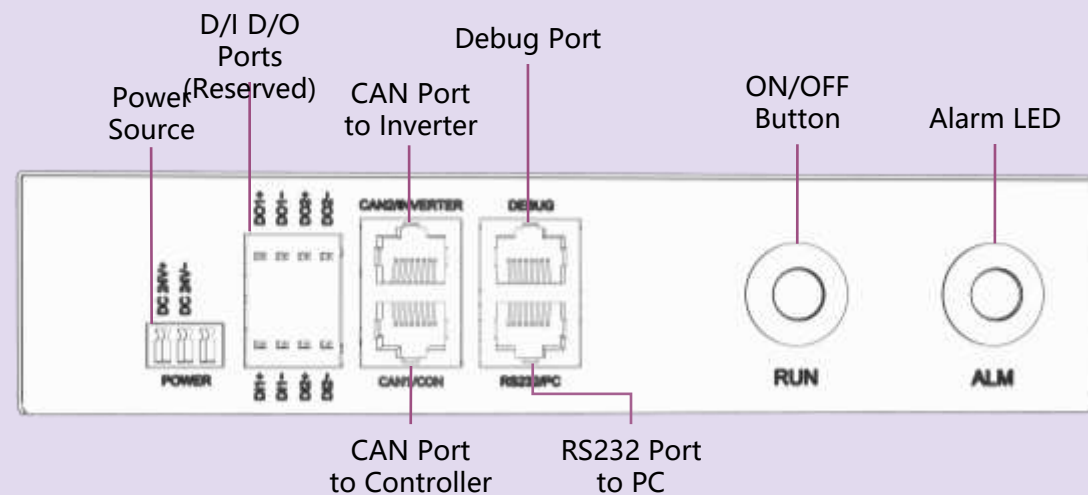
The paraller box contains a paraller as well as the circuitry that powers the paraller.

Paraller Box

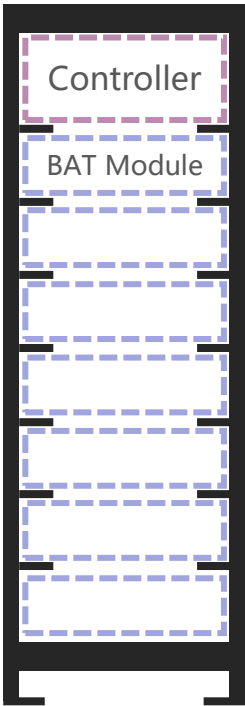
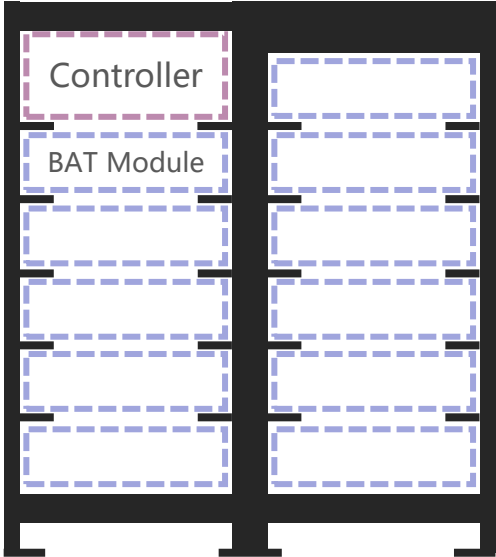
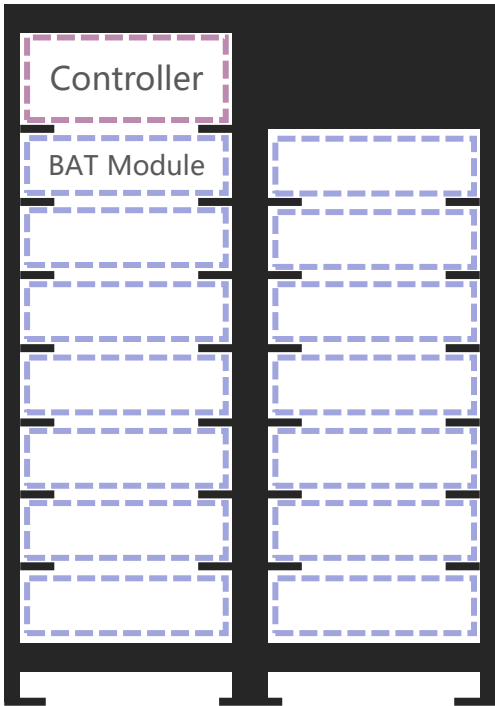


	Paraller Box	Paraller
Operation Voltage (V)	230VAC	24VDC
Max. Clusters	8	8
Communication	CAN/RS232	CAN/RS232
Dimension [W*D*H] (mm)	325 * 323 * 83	230 * 190 * 40
Weight (kg)	6	1.2
Operating Temperature (°C)	-10~55	-10~55

Paraller



Rack

Rack Module	EBR-R-AT8	EBR-R-A6	EBR-R-A8
Application	6-7pcs Battery Modules	8-11pcs Battery Modules	12-14pcs Battery Modules
Capacity Range	32.22-37.59 kWh	42.96-59.07 kWh	64.44-75.18 kWh
Positioning			
Dimension [W*D*H]	554 * 662 * 1526 mm	1092 * 662 * 1206 mm	1092 * 662 * 1526 mm
Rack Weight	60kg	80kg	108kg



05
Certification

