PRODUCT CATALOG

10 years experience | Top BMS R&D Team | OEM&ODM service

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HIGH VOLTAGE BMS MANUFACTURER

Company Introduction

Hunan GCE Technology Co., Ltd.(GCE) is a high-tech company specializing in the R&D and production of BMS and battery energy storage systems for over 10 years. Our products are mainly used for industrial & commercial energy storage and home energy storage.

30s to 75s BMS adopts master-slave integrated design and relay solution to meet the lithium battery demand of multiple strings of small capacity batteries. Greatly reduce the use cost of users.

60s-405s adopts master-slave three-level architecture, which can meet the series and parallel requirements of high-capacity single lithium batteries within 1500V.

7.68KWh-40.96KWh Stackable Home Energy Storage System support 3-8 HV battery modules that are connected in sereis, with small volume, light weight, plug-in embedded design modules, Built-in smart BMS, easy to install and maintain.

Our Advantages

■ **Over 10 years of production experience**

More than 10 years of development and accumulation, we has unparalleled advantages in the BMS industry.

■ **Strong development team**

We have many senior BMS R&D engineers. He has considerable experience in R&D, debugging, and rectification of new products.

■ **Professional service**

We have an excellent service team. Quickly respond to orders and product abnormalities. Everything is customer-centric.

■ **Efficient production system process**

We have advanced production process. It only takes 15 days from order to delivery for conventional products.

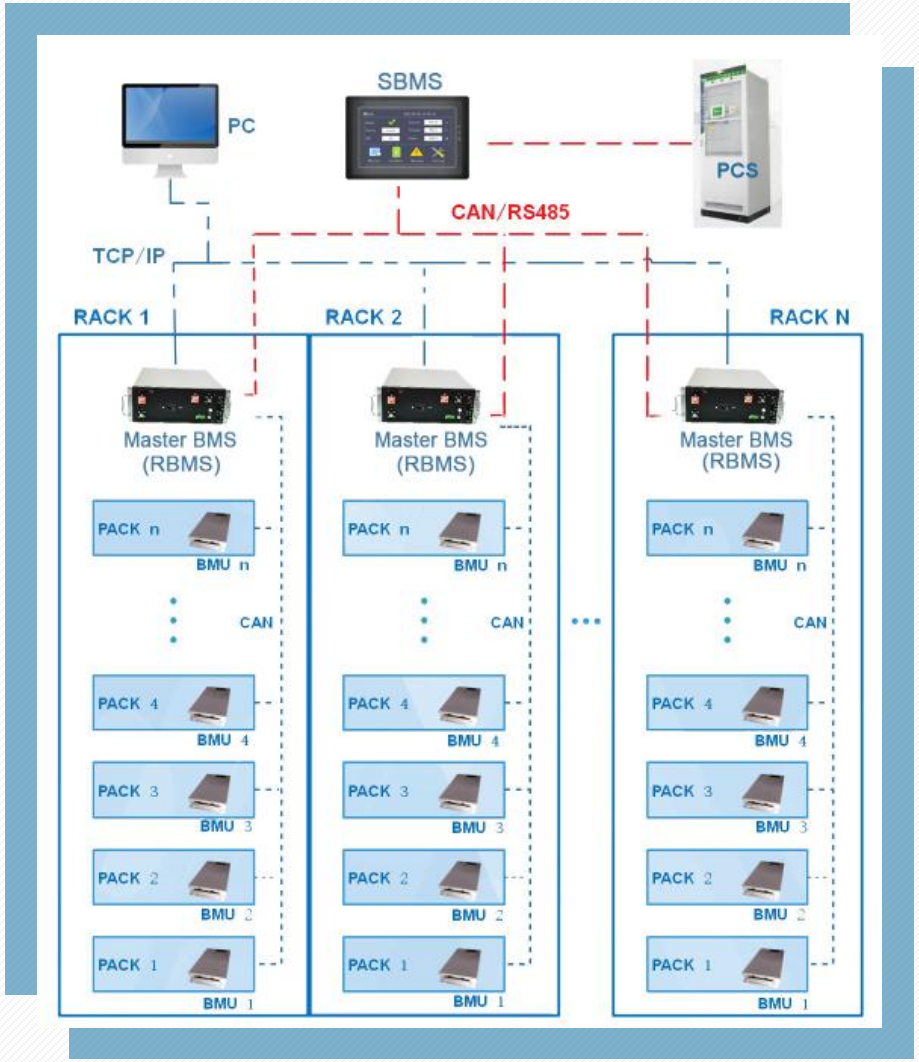
Products List

Category	Model
All-in-one	Integrated BMS
Master	2U RBMS
	3U RBMS
	4U RBMS
	4U RBMS with center-tap
	5U RBMS
	1500V BMS
Slave	BMU(8-24S)
Multi-racks cotroller	SBMS
Stackable Energy Storage System	

Integrated BMS

	Integrated BMS	Integrated BMS with Case
Master and slave all-in-one design		
Rated Current	50A / 100A	50A / 100A
Consumption	≤10W	≤10W
Communication Port	RS485/CAN/LAN	RS485/CAN/LAN
Balancing Method	Passive balancing	Passive balancing
System Data Setting	Set on the display screen or computer software.	Set on the display screen or computer software.
Parallel	Support up to 7 BMS connected in parallel	Support up to 7 BMS connected in parallel
HMI display	3.5" touch screen (optional)	3.5" touch screen
Case	No	Yes
Net Weight	5.5kg	9.6kg
Size	409*232*86mm	480*433*100mm

Master BMS - RBMS



High-Voltage BMS multi-Rack Diagram

FEATURES

- GCE high voltage BMS can be configured as a two-level or three-level architecture, making it suitable for a wide range of applications from KWh to MWh.
- From kWh to MWh, GCE High-Voltage BMS manages up to 1500V DC per battery rack and up to 15racks in parallel with the addition of a Multi rack Controller(SBMS).
- Supports overcharge, over-discharge, over-current, over-temperature, and short circuit protection.
- Supports independent insulation detection of each rack in the energy storage system.
- Supports accurate estimation of SOC/SOH of battery cells and racks.
- Supports real-time detection of battery safety status, fault diagnosis, and warning.
- Supports CAN & RS485 protocols and is compatible with the protocol of most well-known inverter brands in the market.

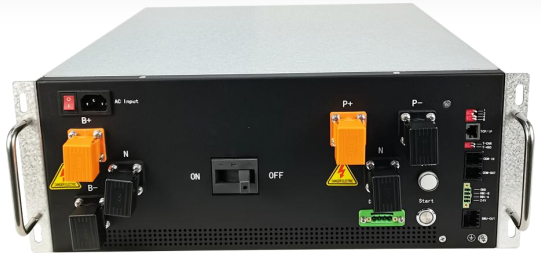
Master BMS - RBMS

2U RBMS

3U RBMS

4U RBMS

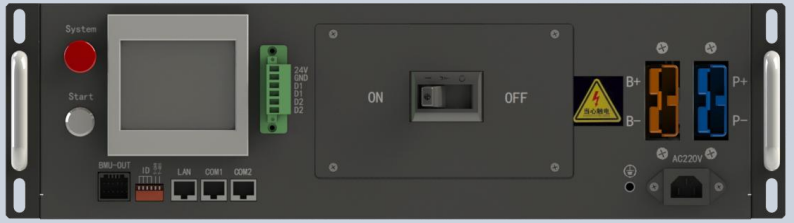
4U RBMS (center-tap)



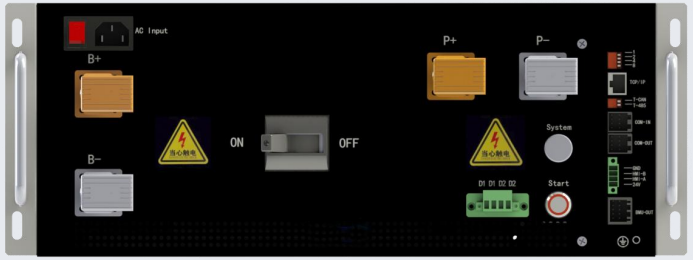
5U RBMS

1500V RBMS

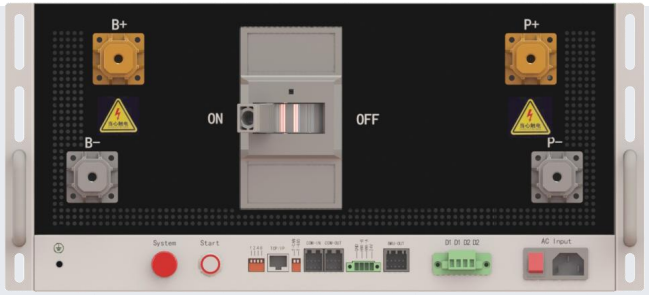
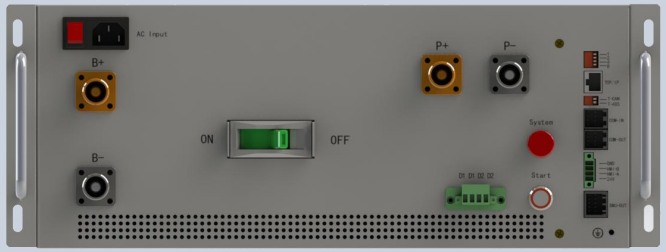
Master BMS - RBMS

	2U RBMS	3U RBMS
		
Voltage Range	120V-500V	120V-600V
Maximum Current	50A / 100A	125A
Consumption	≤15W	⩽15W
Communication Port	RS485/CAN/LAN	RS485/CAN/LAN
Balancing Method	Passive balancing	Passive balancing
System Data Setting	Set on the display screen or computer software.	Set on the display screen or computer software.
Parallel	Support up to 15 RBMS connected in parallel	Support up to 15 RBMS connected in parallel
HMI display	3.5" touch screen (optional)	3.5" touch screen
Net Weight	12kg	16kg
Size	482*89*500mm	482*132*500mm

Master BMS - RBMS

	4U RBMS	4U RBMS (Center-tap)
		
Voltage Range	260V-1000V	260V-1000V
Maximum Current	125A / 160A / 250A	125A / 160A / 250A
Consumption	≤15W	≤15W
Communication Port	RS485/CAN/LAN	RS485/CAN/LAN
Balancing Method	Passive balancing	Passive balancing
System Data Setting	Set on the display screen or computer software.	Set on the display screen or computer software.
Parallel	Support up to 15 RBMS connected in parallel	Support up to 15 RBMS connected in parallel
HMI display	Optional (3.5" touch screen / 7" screen)	Optional (3.5" touch screen / 7" screen)
Center tap	No	Yes
Net Weight	21kg	23.5kg
Size	482*180*500mm	482*180*500mm

Master BMS - RBMS

	5U RBMS	1500V RBMS
		
Voltage Range	120V-1000V	120V-1500V
Maximum Current	400A / 500A	200A / 250A
Consumption	≤15W	≤15W
Communication Port	RS485/CAN/LAN	RS485/CAN/LAN
Balancing Method	Passive balancing	Passive balancing
System Data Setting	Set on the display screen or computer software.	Set on the display screen or computer software.
Parallel	Support up to 15 RBMS connected in parallel	Support up to 15 RBMS connected in parallel
HMI display	Optional (3.5" / 7" touch screen)	Optional (3.5" / 7" touch screen)
Net Weight	28kg	23.5kg
Size	485 * 220 * 550mm	482 * 180 * 500mm

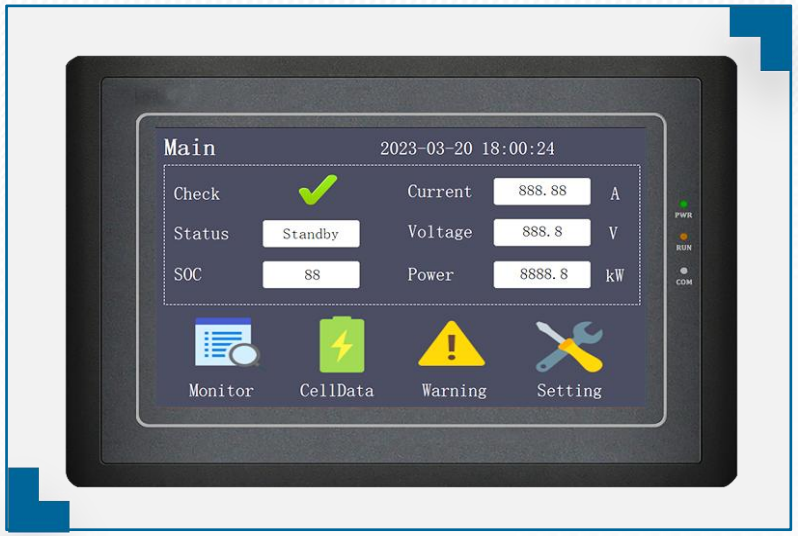
Slave - BMU

Battery Management Unit (BMU), which can acquire data on the voltage and temperature of each cell and ensure that they are operating within safe limits. The BMU also provides cell balancing, which ensures that each cell within the battery pack is charged and discharged equally, preventing any cells from becoming overcharged or undercharged. This helps to extend the overall lifespan of the battery pack and ensure that it operates safely and reliably.

SPECIFICATION

Suitable for battery	**LFP / NMC / LTO**	
Acquisition cell number	**8S-24S**	
Temperature detection	Accuracy	±2℃
	Range	-30~100℃
Voltage detection	Accuracy	±10mV
	Range	0~5V
Balance Method	Passive balancing	
Balance Current	200mA@3.4V (Cell voltage / 17Ω)	
Communication	CAN 2.0B	
Dimensions	213* 103* 35mm（W*H*D）	
Accessories list	Voltage & temperature acquisition wire harness Communication cable	

Multi-Racks Cotroller (SBMS)



Items	Descriptions
Communication port	CAN / RS485 / LAN
IAP Upgrade	Support
HMI display and parameter setting	Support
Dry contact output	3-way
Dry contact input	Support
Number of RBMS can be managed	15sets
Power supply	24VDC(18-28V)
Consumption	5W max,.4.8W normal
Dimensions	300*170*66mm

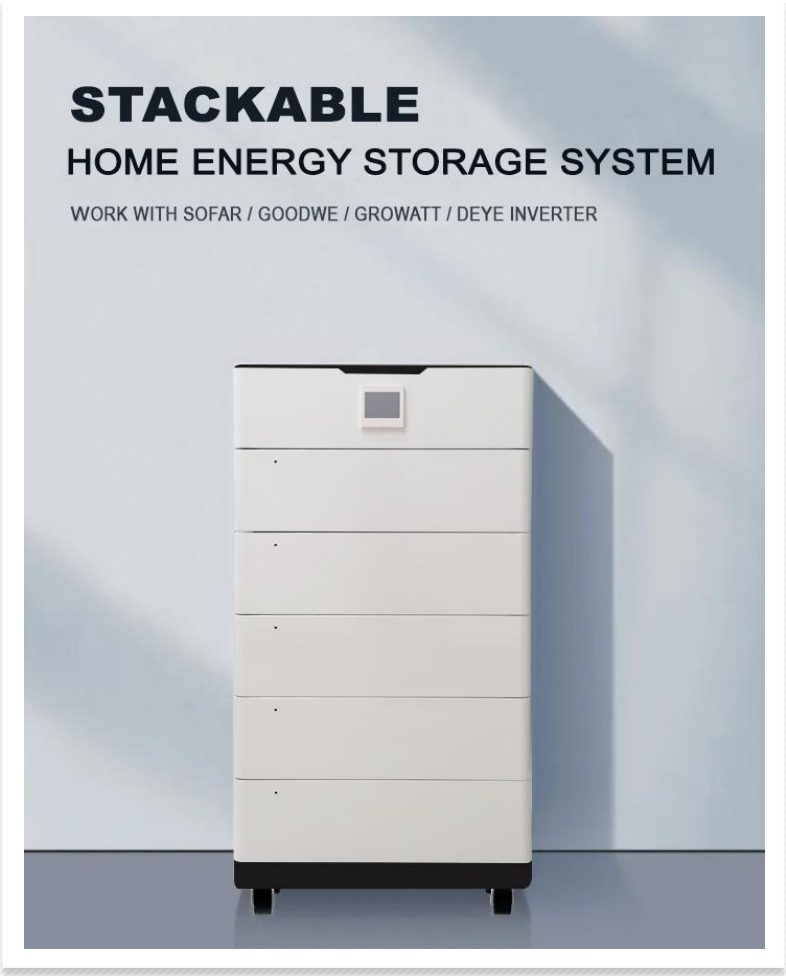
Features

- Real-time display of voltage, temperature, SOC/SOH and other data of each rack and each cell.
- Real-time display over/under voltage, over temperature, over current, insulation and other information of each rack and each cell.
- Real-time display voltage, current, insulation, contactor, circuit breaker information of each rack.
- Real-time display of BMS internal, BMS and EMS, BMS and PCS communication status.
- 7-inch touch screen, with large-capacity historical storage function.
- Rich communication interfaces, such as RS485, CAN, Ethernet, dry contact input/output, etc.
- Support fault detection，identification，and multi level warning.
- Supports remote upgrade, remote maintenance.
- Support the communication with most well-known inverter/PCS brands in the market.

Stackable Energy Storage System

Item	Parameter
Rated Voltage	120V-700V
Isolation Voltage	2800VDC ＜1mA 1min
Power consumption	≤15W
IP Grade	IP20
Normail Working Current	50A / 100A
Communication Port	RS485 / CAN
Insulation Detection	Optional
Battery Type	LFP(LifePO4)
Cycle Life	＞4000 / 5years
Capacity / cells per module	50Ah / 16S
Charge/Discharge Current	≤50Amp / ≤100Amp
Module Series Connection	3-8modules
Cluster Parallel Connection	4 clusters
Balancing Methods	Passive balancing
System Data Setting	Set on LCD or PC software
Working Temperature Range	Charge 0-45℃ / Discharge -10-50℃
HMI Display	4-inch touch screen
Dry Contact	Support
PCS/Inverter Protocols	Compatible with most well-known inverters on the market.

Stackable Energy Storage System



Features

- Grade A cells

Using high quality lithium iron phosphate battery as the main body of energy storage,with feature of large capacity,light weight,large power.

- Flexible configuration

Multiple battery modules can be stacked for expanding output and Capacity.

- Good compatibility

Standard communication protocol, CAN and RS485, compatible with most popular hybrid and off-grid inverters in the market.

- Built in Smart BMS

Accurate coulomb counter (display)

- Long life cycle

More than 4000 times or 5 years.

- High protection measures

Built-in Aerosol active fire protection module, thermal runaway detection and active fire protection.

- Quick installation design

Plug and play assembly, no more cables between packs, saves manual installation costs.

Contact Us

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