PACO CASA Co.,Ltd
www.pacocasa.co.th

Rack Mount $LiFePO_4$ Battery

64 - 240 kWh

Aerosol Automatic Fire Suppression System



Aerosol Fire Suppression System

Quick response, safe and effective fire protection, preventing fire spread and ensuring battery system stability.

Wide-Temp Pro

Operates at -15 ~60 for extreme climates.

Smart Link

RS485/CAN interfaces for real-time data exchange. Support 15 units parallel expansion for flexible energy systems.

Safety Guard

Built-in BMS with 7 protections (OVP/UVP etc.). Cobalt-free LFP battery, thermally stable & safer than ternary batteries.

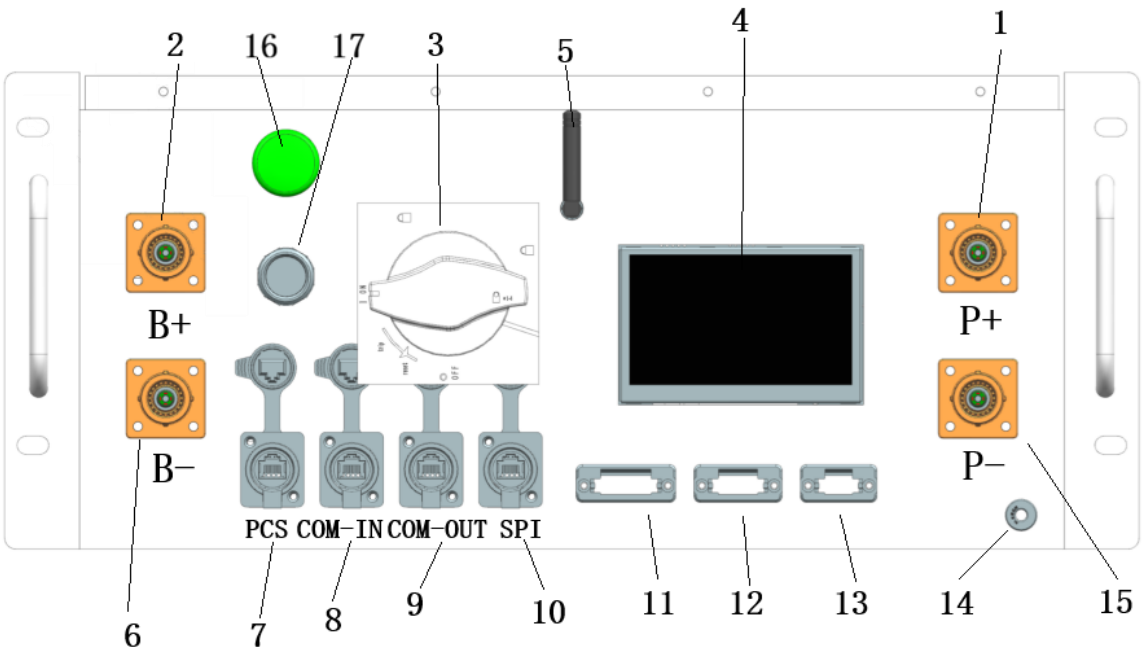
Technical Data



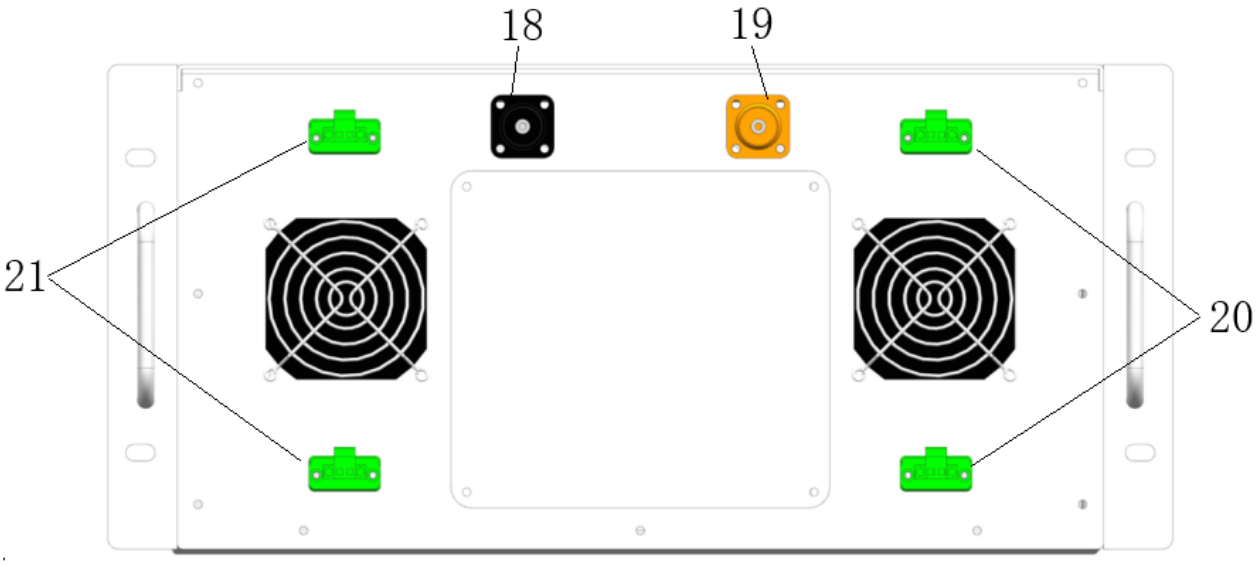
Model	GXE-51314H-16KWH
Item	Specification
Type	$LiFePO_4$
Voltage	150-1000 Vdc
capacity	314Ah
Energy	64~240kWh
Max. Chg Voltage	（51.2×battery pack） V
Cut-off Dsg Voltage	（43.2×battery pack） V
Stand. Chg Current	100A
Max. Chg Current	200A
Stand. Dsg Current	100A
Max. Dsg Current	200A
Peak Dsg Current	200A
Protections	OVP/UVP/OCP/OTP/UTP/SCP etc.
Communication	RS485/CAN
Charge / Discharge Temperature	0°C~45°C / -15°C~60°C
Storage Temperature	0°C~45°C @ 60±20% Relative Humidity
Protection Grade	IP20
Weight	HV Box: 10kg
	Battery Pack: 105kg
Dimension (W x D x H)	558 x 818x 1,350 – 2,070 mm.
Fire Protection System	Aerosol Fire Suppression
Rack	Stackable, flexible combination

Product Introduction

1. Interface Introduction



1.1- Lithium battery host Interface Introduction



1.2- Lithium battery slave Interface Introduction

No.	Name	Silk-screen	Remark
1	Positive	P+	High-voltage quick-insert terminal P positive pole
2	Positive	B+	High-voltage quick-insert terminal B positive pole
3	MCB	/	ON/OFF
4	LCD	/	Display of battery info.
5	WIFI	/	WIFI antenna
6	Negative	B-	High-voltage quick-insert terminal B negative pole
7	PCS	/	Inverter communication
8	COM-IN	CAN/RS485	Battery communication
9	COM-OUT	CAN/RS485	Battery communication
10	SPI	/	SPI port
11	COM1	/	24V+, 24V-
12	EPO	/	EPO+, EPO-
13	FAN	/	FAN+, FAN-
14	Ground wire	/	Earthing wire for lightning protection
15	Negative	P-	High-voltage quick-insert terminal P negative pole
16	ALM	RUN/ALM	Warning light
17	Switch	ON/OFF	Start button
18	Positive	B-	High-voltage quick-insert terminal B negative pole
19	Negative	B+	High-voltage quick-insert terminal B positive pole
20	FAN	/	FAN+, FAN-
21	COM	/	IP, IM

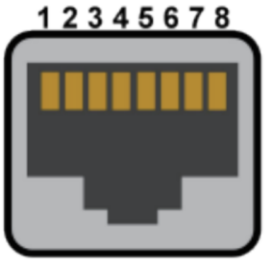
2.Connectors

Charge/Discharge connectors: Positive pole(+) and Negative pole(-) from battery to inverter via breaker

485/CAN: Active communication portal between battery and inverter

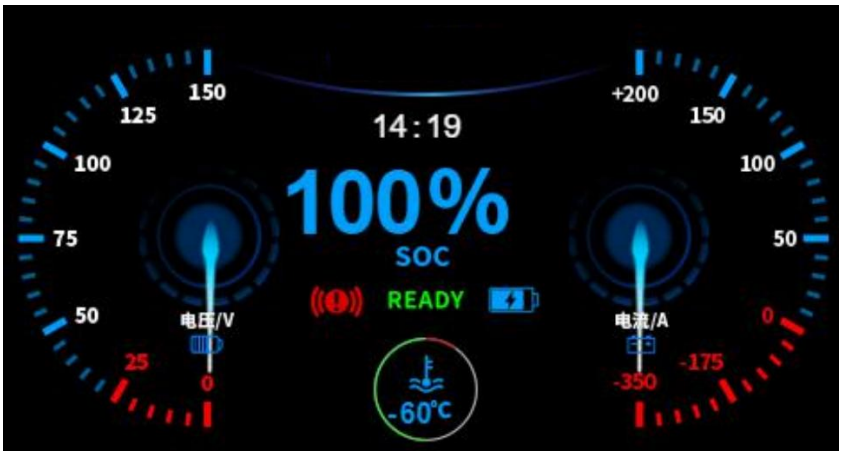
485/CAN: Get dynamic monitoring data of battery from upper computer by USB-RS485 tool

CAN connector is RJ45. And the pin definition is as follow:

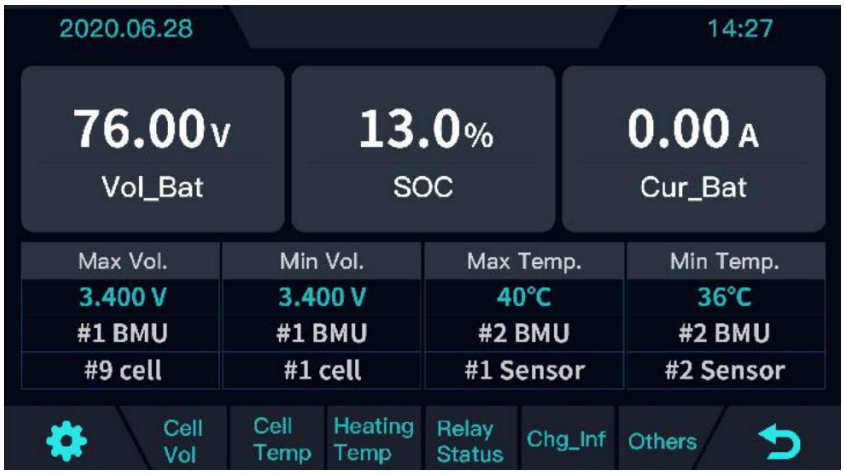


RJ45(8P8C)socket	
Pin	Definition
1/8	RS485-B
2/7	RS485-A
4	CAN-H
5	CAN-L

3.Display Introduction



Touch screen display



Engineering mode



Individual voltage



Charging information

Installation

1.Inventory of items

No.	Items	Qty	Remark
A	Lithium battery host	1	200Ah
B	Lithium battery slave	N	51.2V/battery pack
C	Lithium battery series power cord kit	1(set)	2 AWG
D	Inverter Power Cable	2	2 AWG, red and black
E	Communication Cable	1	Cable with RJ45 connecotor
F	Communication and connection kit	1(set)	Battery pack connection
G	Mounting bracket	N	Stackable:5 layers, 3layers

2.Installation requirements

Make sure that the installation location meets the following conditions.
The installation site must be suitable for the size and weight of the battery
Must be installed on a firm surface to sustain the weight of battery
The area must be water proof
There are no flammable or explosive materials in proximity
The ambient temperature is within the range from 0°C to 45°C
The temperature and humidity is maintained a constant level
There is minimal dust and dirt in the area
Installation must be vertical
Avoid forward or sideway stilt

CAUTION

If the ambient temperature is outside the operating range, the battery pack stops operating to protect itself. The optimal temperature range for the battery pack to operate is 0°C to 45°C. Frequent exposure to harsh temperatures may deteriorate the performance and life of the battery pack.

Warning

It is very important and necessary to read the user guider carefully before installing or using the battery.
Failure to follow any of the instructions or warnings in this document can result in electrical shock, serious injury, death, or may damage the battery and the whole system.
Keep the battery away fire and water.
Do not short shirt positive and negative with wire or metal objects.
If the battery is stored for a prolonged time, it is requirement that they are charged every three to six months, and the SOC should be no less than 60%.
The battery needs to be recharged within 12 hours, after fully discharging.
Do not expose cable outside.
All battery terminals must be disconnected before maintenance.

- Do not use cleaning solvents to clean the battery.
- Do not expose the battery to flammable or harsh chemicals or vapors.
- Do not paint any part of the battery, include any internal or external components.
- Do not connect battery with PV solar wiring directly.
- Any foreign object is prohibited to be inserted into any part of the battery.
- Any warranty claims are excluded for direct or indirect damage due to item above.

During operation

If the battery system needs to be moved or repaired, the power must be cut off first and the battery is completely shut down.
It is prohibited to connect the battery with different type of battery;
It is prohibited to put the batteries working with faulty or incompatible inverter;
In case of fire, only dry powder fire extinguisher can be used, liquid fire extinguishers are prohibited;
Please do not open, repair or disassemble the battery.
We do not undertake any consequences or related responsibility due to violation of safety operation or violating of design, production and equipment safety standards .

Warranty

If you have purchased this product from factory, you should be aware that this warranty is provided in addition to other rights and remedies held by a consumer at law.
You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

For the above mentioned products, you receive the factory warranty valid for 7 years from the date of delivery from factory. The factory warranty covers any costs for repair or spare parts during the agreed period beginning on the date of delivery of the device, subject to the following conditions.

Factory Warranty Scope

The factory warranty does not cover damages caused by following reasons:
Breaking the product seal (the casing opened)
Transport damage
Incorrect installation or commissioning
Failure to observe the user manual, quick installation instructions
Incorrect usage or inappropriate operation
Insufficient ventilation of the device
Failure to observe the applicable safety regulations
Force damage does it cover cosmetic defects which do not influence the energy production.

Warranty Card

User Information

Company/User Name:

Address:

Telephone:

Email:

Project installation location:

Product Information

Battery Model:

Serial No:

Invoice Number:

Purchase Date:

Dealer:

Commission date:

Fault/Error Description:

PACO CASA

www.pacocasa.co.th

345/19 Headquarters Ekamai-ladprao Soi Ladprao 94 (Panjamit)
Phlabphla,Wangthonglang, Bangkok 10310