Technical features

Storage battery for photovoltaic systems

8kWh Model: E-BS14-001

A storage system for a photovoltaic system is a set of batteries that store the energy produced by the photovoltaic panels and which is not immediately consumed. This mechanism allows you to accumulate energy in excess of consumption produced during the day and use it in the evening/night without having to request it from the electricity grid. The photovoltaic system with storage, therefore, allows the energy to be used at a different time compared to when it was produced.

the new E-BS14-001 is a lithium ion battery storage system for domestic photovoltaic systems.

It allows you to store the energy produced by photovoltaic panels with a capacity of 8kWh.

Thanks to the addressing switch it is possible to connect up to 16 batteries to the same system.

Thanks to the simple graphic interface on the display it is possible to check the status of the battery pack and the individual cells at any time.

It uses CAN 2.0 and RS 485 communication protocols to communicate with the inverter providing status and operating data.

With the monitoring application provided for the PC it is possible, in addition to checking the status, to set operating parameters and any alarms.

The battery case is made of 1.5 mm thick steel to ensure excellent resistance to shocks and stress

There is an on and off button to safely mount or isolate the battery.

The status LEDs indicate the battery charge, whether operation is correct and whether there are alarms to report.
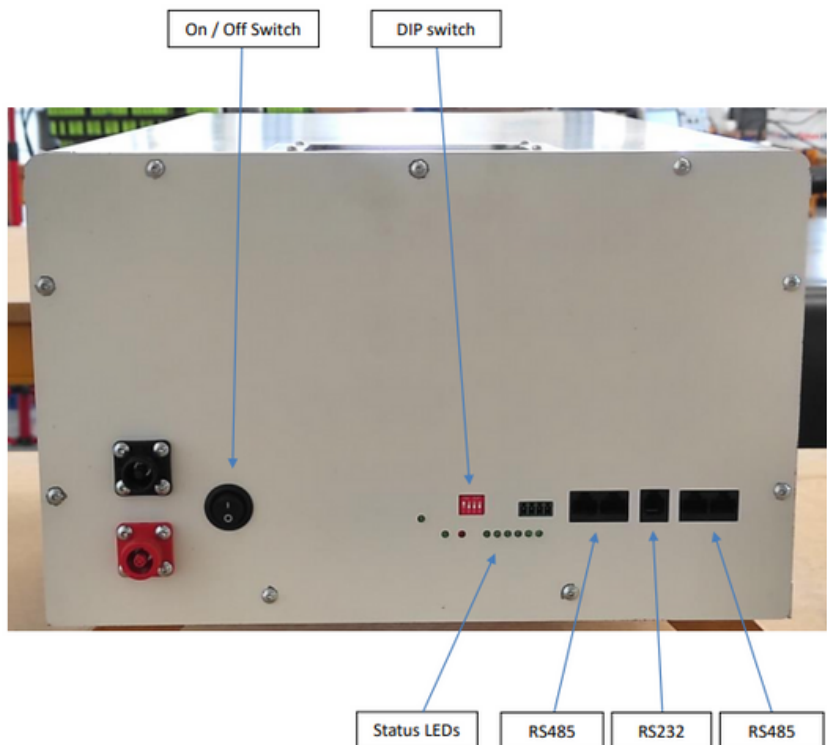
Li-ion Battery Pack (Model E-BS14-001)

Battery Data

Minimum voltage	**42V**
Nominal tension	**50.4V**
Maximum voltage	**58.1V**
Capacity	**162.4Ah - 8.2KWh**
CC-CV charging current	**100A - Cut-off 0.5A**
Rated discharge current	**120A**
Maximum discharge current	**150A**
Maximum discharge current (30s)	**225A**

General data

|	
Storage temperature	**-10°C +60°C**
Discharge temperature	**0°C +45°C**
Charging temperature	**0°C +45°C**
Dimensions	**630mm x 360mm x 225mm**
Weight	**55 Kg**
Batteries connectable in parallel	**15 units**
Communication ports	**CAN2.0 / RS485**
BMS monitoring parameters	**SOC, System voltage, current, cell voltage, temperature, current trend graph.**

Certifications IEC 62619/62620 (Cells and Module), CE, UN 38.3

Compatibility

Compatible Inverters	
Brand	**Compatibility**
Pylontech	CAN/RS485
Goodwe	CAN
Megarevo	CAN
Growatt	RS485
Voltronic	RS485
Say	CAN
Soroteec	CAN
So far	CAN
Solax	CAN
Must	RS485
Pace	RS485
GT	RS485
Thing	RS485

Contact the company for further specifications on compatibility with other inverters

Connectivity and Communication

6022-JKB (Commuication board)

RS485　CAN　RS232
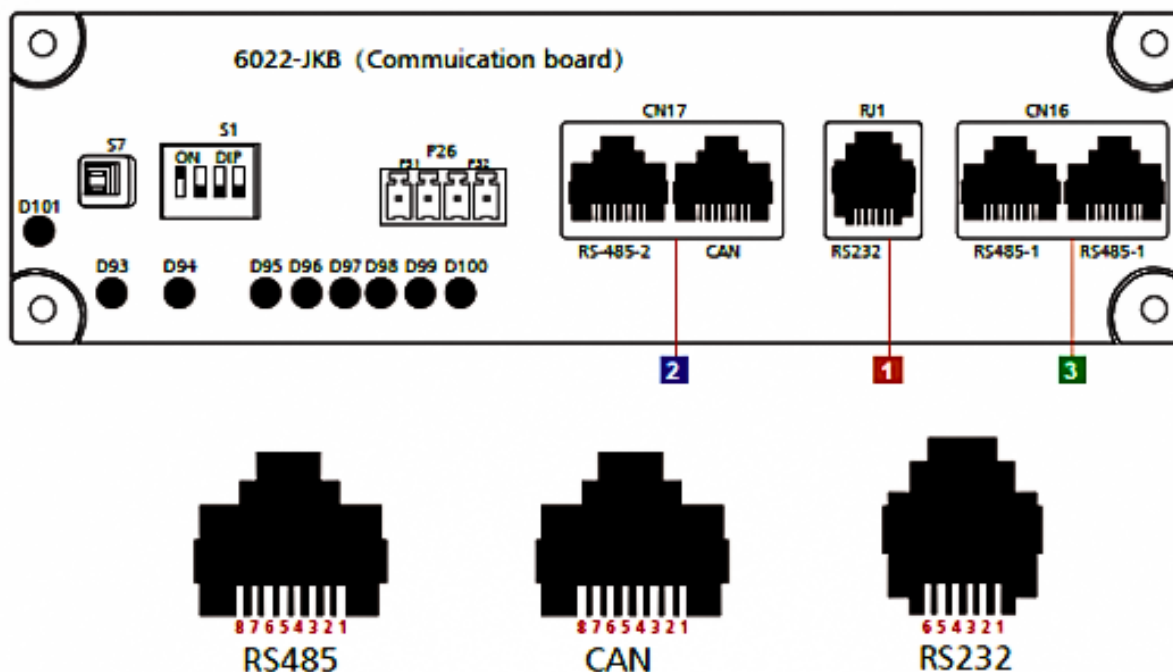
1

RS232 -- using 6P6C vertical RJ11 sockets	
RJ11 pin	Definition Description
2	NC
3	TX（veneer）
4	RX（veneer）
5	GND

2

RS485--Using 8P8C vertical RJ45 sockets		CAN -- using 8P8C vertical RJ45 sockets	
RJ45 pin	Definition Description	RJ45 pin	Definition Description
1, 8	RS485-B1	1, 2, 3, 6, 8	NC
2, 7	RS485-A1	4	CANH
3, 6	GND	5	CANL
4, 5	NC	7	GND

3

RS485--Using 8P8C vertical RJ45 sockets		RS485 -- using 8P8C vertical RJ45 sockets	
RJ45 pin	Definition Description	RJ45 pin	Definition Description
1, 8	RS485-B	1, 8	RS485-B
2, 7	RS485-A	2, 7	RS485-A
3, 6	GND	3, 6	GND
4, 5	NC	4, 5	NC

RS 232 adapter
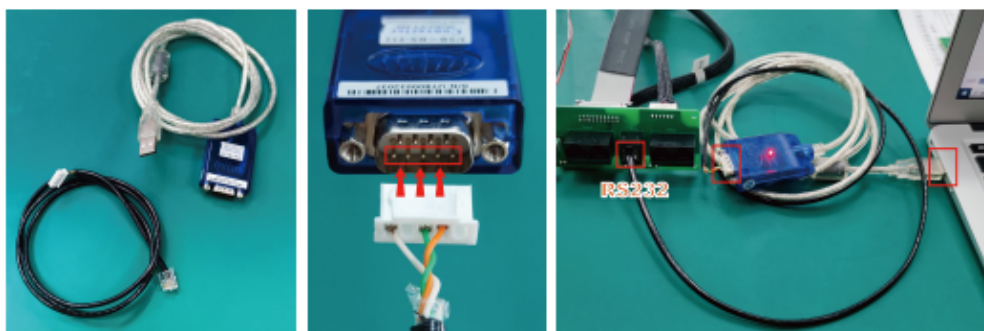
It is necessary to connect with the RS 232 adapter as shown in the figure

Monitoring Software
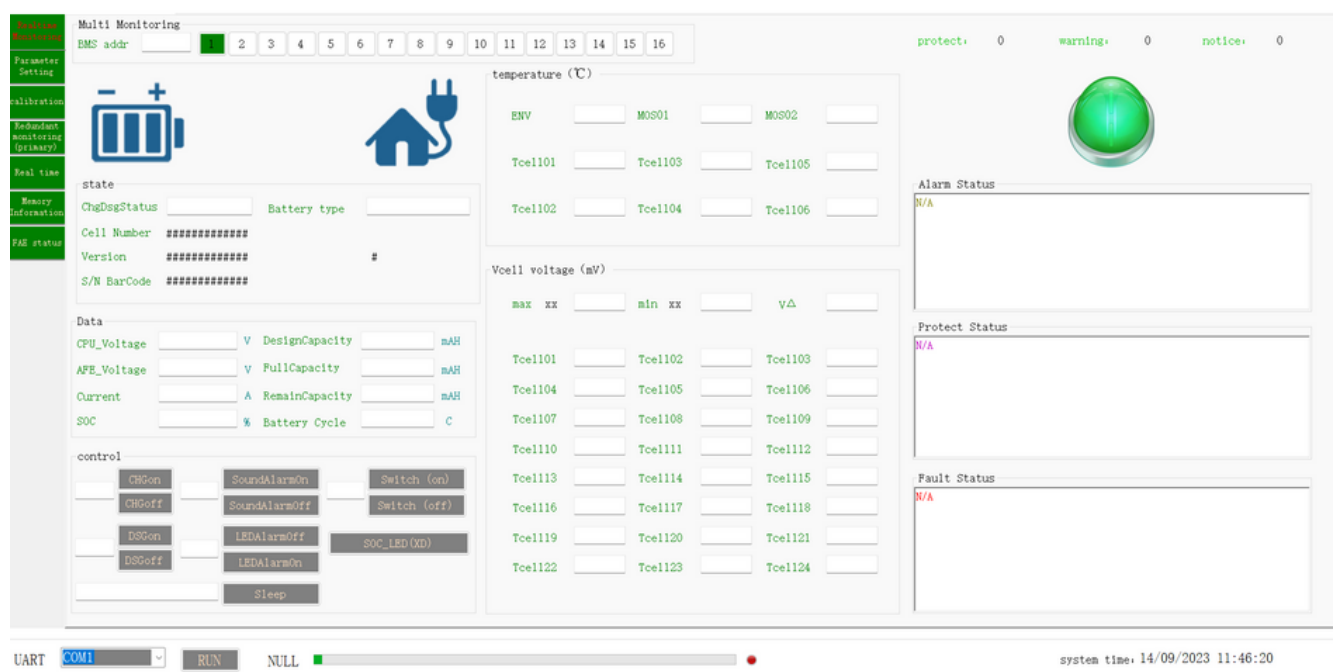
With the monitoring software we can monitor in real time every aspect of battery operation, voltage, current and general capacity, single cell and temperature parameters, alarms and warnings.

It is possible to modify and export the operating data.