

Wall Mounted Energy Storage | User Manual

DYA-50Q

QUICK START GUIDE




Chapter 1 Preface

1.1 Explanation

This manual is applicable to the assembly, installation, commissioning, and maintenance of wall mounted energy storage batteries. Not involving any details of peripheral devices and accessories (such as photovoltaic modules) connected to this product. For information on other related connected devices, please refer to their manual.

User and installer



This manual is applicable to personnel who have received electrical training and possess qualified knowledge of equipment construction and operation skills. This personnel is capable of handling the hazards and hazards involved in the installation of electrical equipment

CAUTION

1.2 Postscript

Visit our official website for more product information.







1.3 Storage of instructions

Please keep this user manual properly for future use. The manufacturer shall not be liable for any damage or damage caused by failure to follow the instructions in the manual.

1.4 Standard Explanation

The icons in the following table will appear in the subsequent text, and the following annotations will be made.

1.5 Symbols and descriptions

	Be careful of high temperatures! This product may become hot during operation. Do not touch this product during operation.		DC
	Dangerous voltage warning! This product operates under high voltage. All work related to this product must be carried out according to the description in its documents and by qualified industry personnel.		AC
	Connection points for grounding protection		Danger signal! There is a risk of electric shock! The installation operation can only be carried out after 5 minutes of turning off and disconnecting the inverter.

Chapter 2 Safety and Compliance

1. DC and AC circuit breakers

Use DC and AC circuit breakers to safely disconnect the equipment from the grid and photovoltaic inputs. DC and AC circuit breakers should be able to disconnect all non grounded installed conductors.

2. Qualification of technical workers

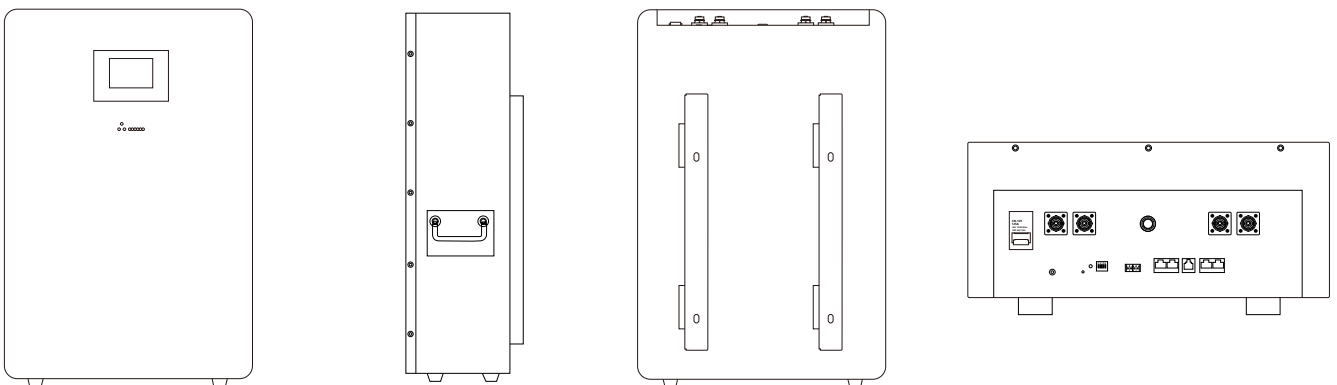
- Understand the working principle and operating methods of this product.
- Knowing how to handle the hazards and risks associated with the installation and use of electrical equipment and devices, having participated in training on the installation and commissioning of electrical equipment and devices.
- Familiarize oneself with all applicable standards and guidelines.
- Familiarize oneself with and comply with this manual and all safety instructions.

Chapter 3 Product Description

3.1 Overview of Energy Storage Battery

Product model (DYA50Q)

Product appearance

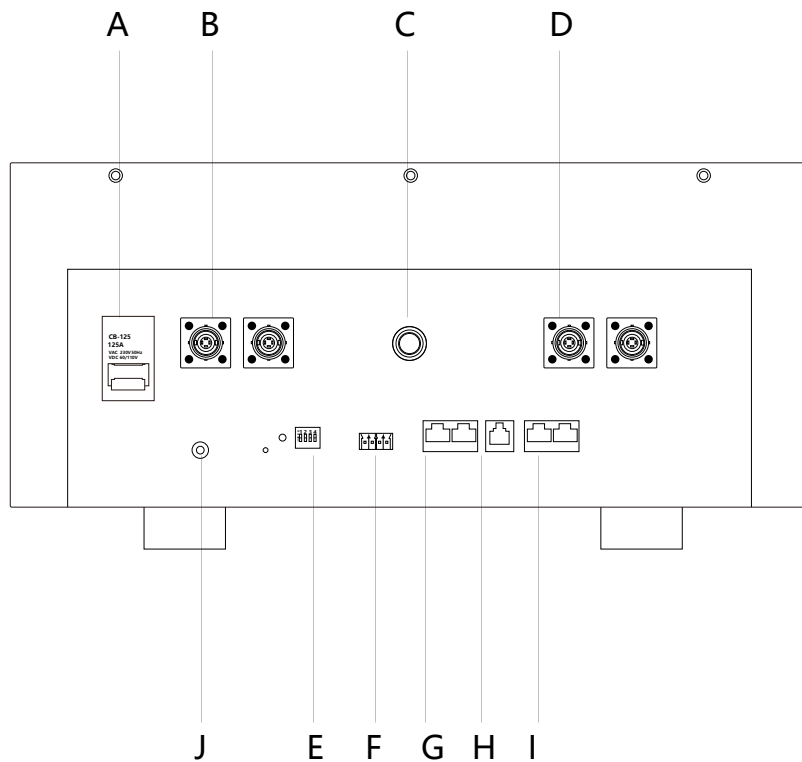


3.2 Equipment Information

Wall mounted energy storage systems typically consist of solar panels, batteries, inverters, controllers, and distribution boxes. It can convert solar energy into direct current through solar panels and store it in the battery. When the user needs electricity, the inverter converts direct current into alternating current and supplies it to the user for use.

Wall mounted energy storage systems are energy storage devices installed on walls, typically used in households or small commercial spaces. It combines components such as solar power generation systems, batteries, and inverters to achieve the storage and release of solar energy to meet the power needs of users.

Product Interface Description



A	Disconnect Switch
B	Input positive interface
C	Weak current switch
D	Input negative interface
E	ID DIP switch
F	Dry contact interface
G	RS485-1
H	RS232
I	RS485-2
J	Reset key

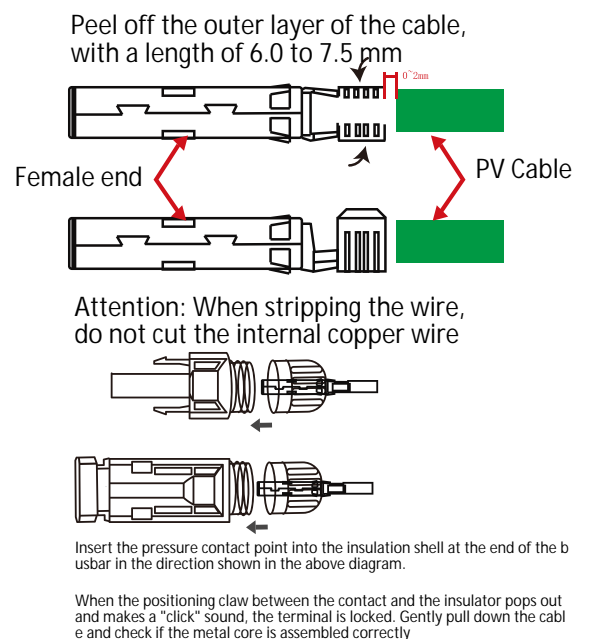
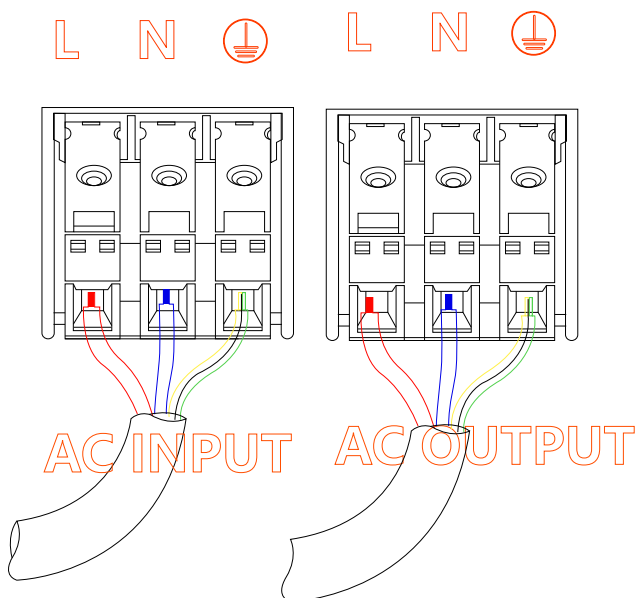
Basic installation requirements

This section of guidance is for installation personnel to choose the appropriate installation location to avoid damaging the machine or injuring operators.

- This product must not be installed in direct contact with water
- To avoid reducing the output power of the product due to overheating, please do not expose the device directly to sunlight
- The humidity of the environment around the equipment should be between 0-95%, and there should be no condensation
- The installation position must be convenient for future maintenance
 - Do not install the product on buildings made of flammable or heat-resistant materials
- Stay away from places that children can touch
- Do not cover this product and do not place anything on the device
- Do not install the product near strong magnetic signals such as TV antennas or other antennas or cables. The equipment needs sufficient cooling space to provide optimal ventilation and ensure sufficient heat dissipation. The ambient temperature should be below 40C to ensure optimal operation.
- During installation, avoid prolonged work under sunlight, rain, and snow pressure.

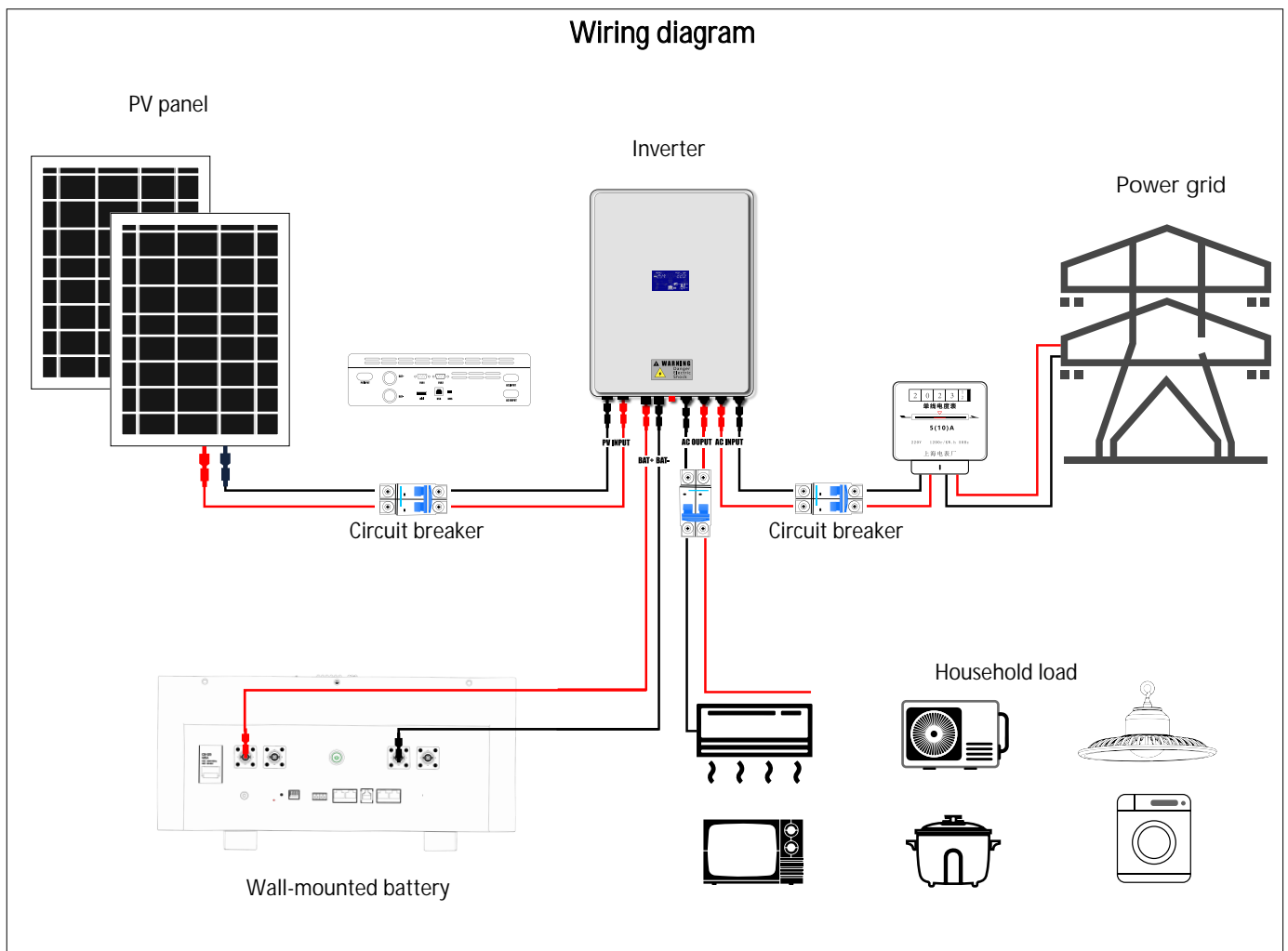
Suggested cable requirements for AC cables and photovoltaic cables

Wire	Wire gauge	Cable (mm ²)	Outer diameter (MM)
Silicone Wire	4AWG	2 5	11.5



3. Parallel use of batteries

Wall mounted batteries can serve as backup power sources to provide power support to users in the event of power outages or grid failures.



Attention: Important!!!

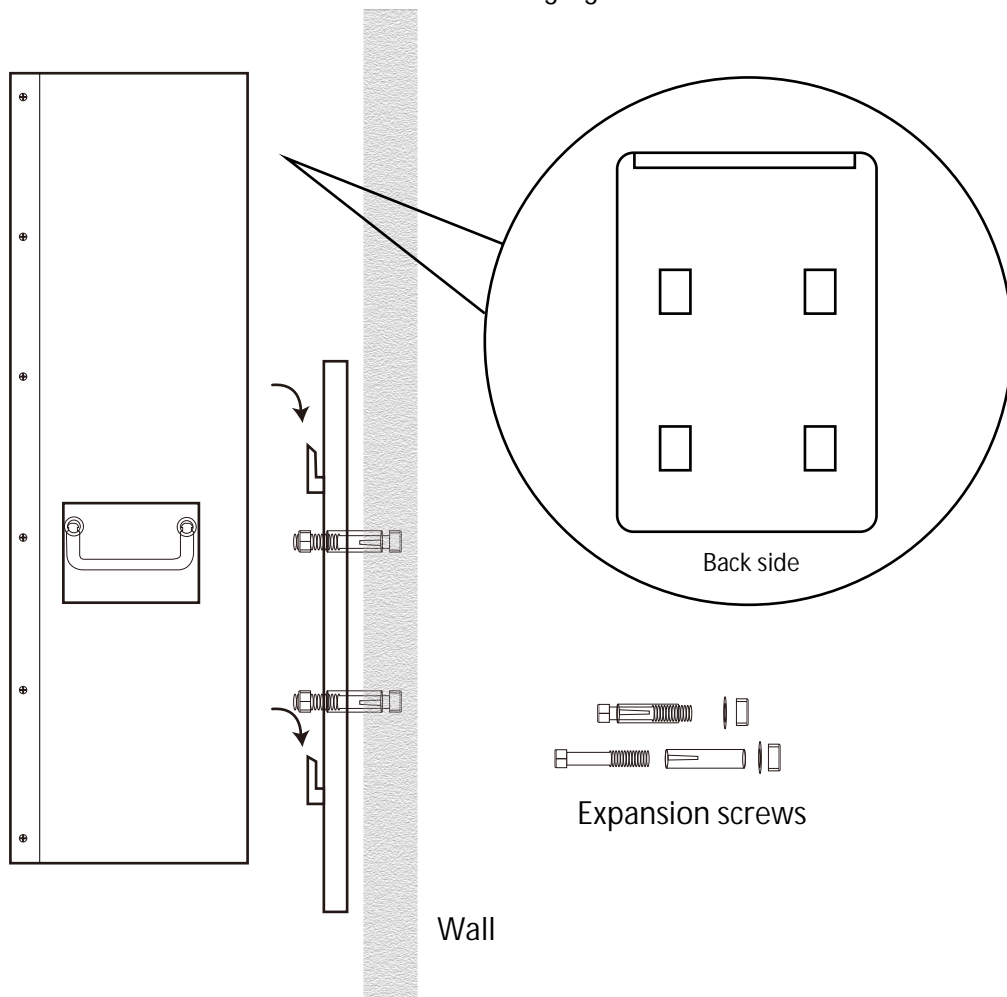
Warning: Before attempting to hardwire the AC power supply to the unit, please ensure that the AC power supply is disconnected

Attention: It takes at least 23 minutes for air conditioning and other electrical appliances to restart, as it requires sufficient time to balance the refrigerant gas in the circuit. If there is a power shortage and it is restored in a short period of time, it will cause damage to the connected devices. To prevent such damage,

Please confirm with the air conditioning manufacturer before installation whether it is equipped with a delay function. Otherwise, this off grid solar inverter will trigger

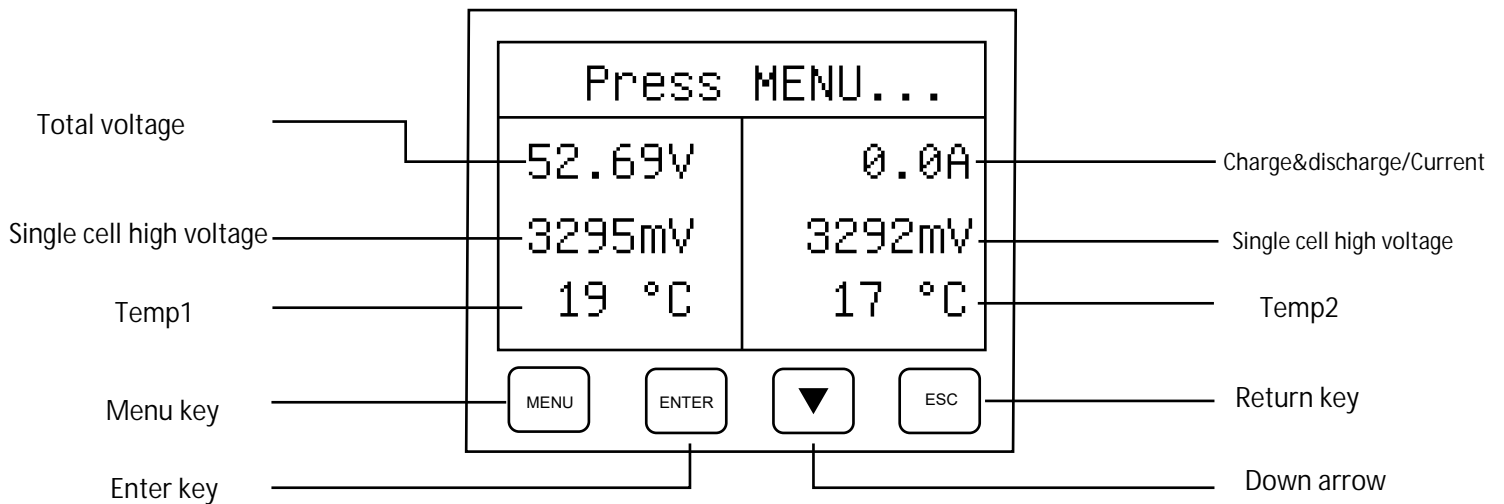
Overload faults and output cuts can protect your device, but sometimes it can still cause internal damage to the air conditioning.

Ensure normal installation and use, attach the wall mounting bracket tightly to the wall and fix it with M8 expansion screws. After fixing the bracket, align the wall mounting card slot with the bracket and place it downwards as shown in the following figure



1. LCD display can be divided into icon display, numerical display and function setting area, and work modedisplay area.

Home page display:



Level 1 display

```
—> AnaLog      Info >>  
— — BMS  Status >>  
— — Para  Setting >>  
— — Sys   Setting >>
```

1. Analog Info

2. BMS Status

3. Para Setting

4. Sys Setting

```
—> Set >>  
>>  
>>  
>>  
>>
```

5. Protocol Setting

```
—> Packv:    53.69 >>  
— — Im:      0 >>  
— — Temperature >>  
— — Cell Voltage >>
```

1.1 Pack Voltage

1.2 Current

1.3 Temperature

1.4 Cell Voltage

```
—> cellcapacity >>
```

1.5 Cell Capacity

—> PCB-T: 25.3 >>
— — ENV-T: 28.0 >>
— — T1: 24.0°C >>
— — T2: 27.0°C >>

1.3.1 Ambient Temp

1.3.2 Mos Temp

1.3.3 Cell1 Temp

1.3.4 Cell2 Temp

— — T3: 24.0°C >>
— — T4: 24.0°C >>

1.3.5 Cell3 Temp

1.3.6 Cell4 Temp

```
SOC :          100 %  
FCC :          100.0AH  
Rm  :          99.9AH  
CC  :           0
```

1.5.1 SOC

1.5.2 Full Cell Capacity

1.5.3 Remaining Capacity

1.5.4 Cycles

```
— > Status:  Idle  
— — Record >>  
— — BMS   Status >>>
```

2.1 Status

2.2 Record

2.3 BMS Status

```
— — SCP          0  
— — O/UTP        1  
— — OCP          2  
— — UCP          52
```

2.2.1 Short Circuit Protection

2.2.2 Temperature Protection

2.2.3 Overcurrent Protection

2.2.4 Undervoltage Protection

```
— — OVP          50
```

2.2.5 Overvoltage Protection

-- Cell01: 3333mV
-- Cell02: 3333mV
-- Cell03: 3326mV
-- Cell04: 3325mV

1.4.1 Cell1 Voltage

1.4.2 Cell2 Voltage

1.4.3 Cell3 Voltage

1.4.4 Cell4 Voltage

-- Cell05: 3327mV
-- Cell06: 3327mV
-- Cell07: 3326mV
-- Cell08: 3327mV

1.4.5 Cell5 Voltage

1.4.6 Cell6 Voltage

1.4.7 Cell7 Voltage

1.4.8 Cell8 Voltage

-- Cell09: 3327mV
-- Cell10: 3327mV
-- Cell11: 3328mV
-- Cell12: 3329mV

1.4.9 Cell9 Voltage

1.4.10 Cell10 Voltage

1.4.11 Cell11 Voltage

1.4.12 Cell12 Voltage

-- Cell13: 3327mV
-- Cell14: 3328mV
-- Cell15: 3328mV
-- Cell16: 3327mV

1.4.13 Cell13 Voltage

1.4.14 Cell14 Voltage

1.4.15 Cell15 Voltage

1.4.16 Cell16 Voltage

-- Nom-production
manuf acturer can
now use.

3.1 Manufacturer

-- Baud rate:9600

4.1 Baud Rate

-- > Set-CAN >>
-- Set-RS485 >>

5.1 CAN Set up

5.2 RS485 Set up

CAN communication protocol

-- > PYLON-LOW0
-- PYLON-LOW1
-- GOOWE0
-- MEGARV00

5.1.1 Pylon Tech 0

5.1.2 Pylon Tech 1

5.1.3 Goodwe

5.1.4 Megarevo0

Press the Enter key when the arrow points to the communication protocol. The black background displayed on the screen indicates successful selection of the current protocol

— > DEYEO
— — SOROTEECO
— — SOFARO

5.1.5 Deye

5.1.6 Sorotec

5.1.7 Sofar

RS485 Communication protocol

— > PYLON-LOWO
— — GROWATT000
— — VOLTRONLCO
— — PACEO

5.2.1 Pylon tech

5.2.2 Growatt

5.2.3 VoltronicPower

5.2.4 PACE

— > GTO
— — SAKO

5.2.5 GT

5.2.6 SAKO

Remarks:

This installation manual is a simplified version of the installation guide. For specific installation and usage instructions, please refer to the installation and usage instructions provided by each component of the photovoltaic power generation and energy storage system!

If the installation is not carried out in accordance with this manual and their respective installation instructions, resulting in equipment damage, our company has the right not to provide warranty