



Distributed power supply

DPS-A 6-10KVA

User Manual

Xiamen Evada Electronics Co., Ltd.

Safety Instructions and Precautions

The DPS fully meets the equipment safety requirements of the operating area. DPS and battery modules contain dangerous voltages inside, but they cannot be touched by non-maintenance personnel. The possibility of exposure to high voltages is minimized as components with dangerous voltages can only be accessed by removing the protective cover with a tool. If the equipment is operated

1. Safety instructions

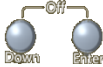
- 1) There are no user-operable parts inside the distributed power supply (DPS) , please do not open the DPS cover without authorization, otherwise there will be a risk of electric shock, and the resulting DPS failure is not covered by the warranty.
- 2) The distributed power supply (DPS) contains a battery module , even if it is not connected to the AC mains, there may still be voltage at its output.
- 3) When the DPS needs to be moved or re-wired, the mains input and battery input must be cut off, and the DPS must be completely shut down. Otherwise, there may still be electricity at the output terminal, and there is a risk of electric shock.
- 4) In order to ensure personal safety and ensure the normal use of the UPS , the UPS should be reliably grounded before use .
- 5) When DPS is applied to IT power distribution system, a short-circuit protection device must be installed on the neutral line.
- 6) The use environment has a certain influence on the service life and reliability of DPS . Therefore, please pay attention to avoid long-term use of DPS in the following working environments :
 - High, low temperature and humid places exceeding the technical specifications (temperature: 0 °C ~ 45 °C , relative humidity: 0 % ~ 95 %)
 - Places exposed to direct sunlight or near heat sources
 - A place subject to vibration and easy to be hit
 - Places with dust, corrosive substances, salt and flammable gases
- 7) Please keep the air inlet and outlet of DPS unobstructed. Poor ventilation will cause the temperature inside the DPS to rise, which will shorten the life of the internal components of the DPS , thus affecting the life of the DPS .
- 8) Do not allow liquid or other foreign objects to enter the DPS case.
- 9) In case of fire around, please use a dry powder fire extinguisher, if you use a liquid fire extinguisher, there is a danger of electric shock.
- 10) The output cable of DPS shall not be greater than 10m.

2. Precautions for host maintenance

1) Do not disconnect the grounding cable of the distributed power system (DPS) or the grounding cable of the building system, otherwise the protective grounding of the distributed power system (DPS) and the connected load will fail.

2) The distributed power system (DPS) is characterized by its own internal battery, so even if the distributed power system (DPS) is not connected to any building wiring system, its output terminal block may still be charged.

3) If you want to disconnect the distributed power system (DPS), please press the key

first , and then disconnect the main power supply. 

4) Prevent any liquid or other foreign matter from entering the distributed power system (DPS).

3. Battery precautions

1) It is forbidden to reverse the positive and negative poles of the battery pack, or directly insert the battery pack into the input power of the charger.

2) It is forbidden to contact or store the electrodes of the battery pack with unnecessary wires or other metal substances to avoid short circuit.

3) Nailing, knocking, throwing, and stepping on the battery pack are prohibited.

4) It is forbidden to disassemble the battery pack or modify the outer packaging of the battery pack without permission.

5) It is forbidden to use it under hot sunlight, otherwise it may cause the battery to overheat, catch fire or fail to function.

6) It is strictly forbidden to put the battery pack into fire or heat the battery pack, and do not store the battery pack in a high temperature environment.

7) It is forbidden to put the battery pack in water or rain for a long time, and it should be placed in a cool and dry environment during storage.

8) It is forbidden to charge continuously for more than 24 hours.

9) The battery is not allowed to discharge continuously during the charging process.

10) During the charging or discharging process of the battery, if there is an abnormal smell or noise, please stop charging or discharging immediately and contact the manufacturer.

11) When the battery is used outside the range of 0~30 °C, the capacity may decrease, which does not mean that the battery is damaged.

Table of contents

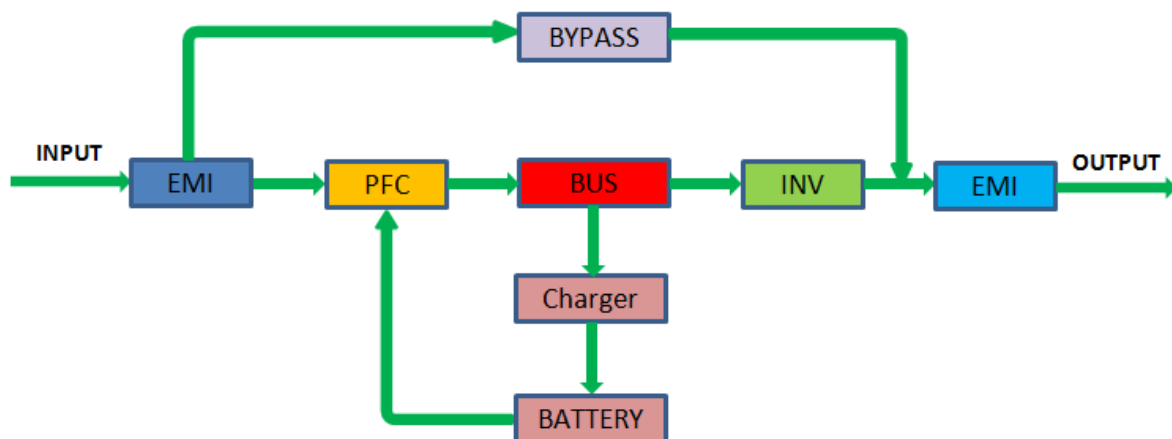
1.	Product description.....	1
1.1	System Block Diagram.....	1
1.2	Composition of Distributed Power System.....	2
1.2.1	Host power module.....	3
1.2.2	Battery module.....	4
1.2.3	Main cabinet power distribution module.....	4
1.3	Communication interface and communication protocol.....	7
1.3.1	Distributed power supply (DPS) communication interface RJ45--485 interface pin wiring definition.....	7
1.3.2	Distributed power supply (DPS) communication interface composite terminal -485 interface pin wiring definition.....	8
1.3.3	Networking mode:.....	8
1.4	Dimensions.....	9
1.5	Technical Parameters.....	11
2.	Installation and use.....	12
2.1	Preparations before installation.....	12
2.2	Stand-alone device installation.....	13
2.2.1	Connection Precautions.....	13
2.2.2	Putting the main chassis on the shelf.....	15
2.2.3	Distributed power system cable connection.....	15
2.2.4	Power on the device.....	18
2.2.5	Battery discharge test.....	20
3.	User operations.....	21
3.1	LED indicator LCD display.....	21
3.2	Sound alarm.....	26
3.3	Stand-alone operation.....	27
3.3.1	Mains Mode Startup.....	27
3.3.2	Power on without mains power (battery mode).....	28
3.3.3	Precautions for connecting equipment (load).....	28
3.3.4	Battery Charging.....	29
3.3.5	Battery Mode Operation.....	29
3.3.6	Shutdown in mains mode.....	30
3.3.7	Shutdown in battery mode.....	30
3.3.8	Buzzer Mute _.....	31
3.3.9	Operation in alarm state.....	31
3.3.1	Operation in 0 fault mode.....	31
3.4	LCD settings.....	32
4.	Troubleshooting.....	35
4.1	LCD display alarm icon troubleshooting.....	36
4.2	LCD display fault code troubleshooting.....	37
4.3	Troubleshooting other problems.....	40
5.	Module replacement.....	41

5.1	Battery Module Replacement Procedure.....	41
5.2	Main chassis removal steps.....	43
5.2.1	There is a problem with the main chassis.....	43
5.2.2	Host power module installation:.....	45
6.	Inspection and maintenance.....	46
6.1	Inspection.....	46
6.1.1	Distributed power host inspection.....	46
6.1.2	Battery module inspection.....	47
6.1.3	Inspection records and inspection reports.....	47
6.2	Maintenance.....	47
6.2.1	Battery storage.....	47
6.2.2	Battery maintenance.....	47

1. Product description

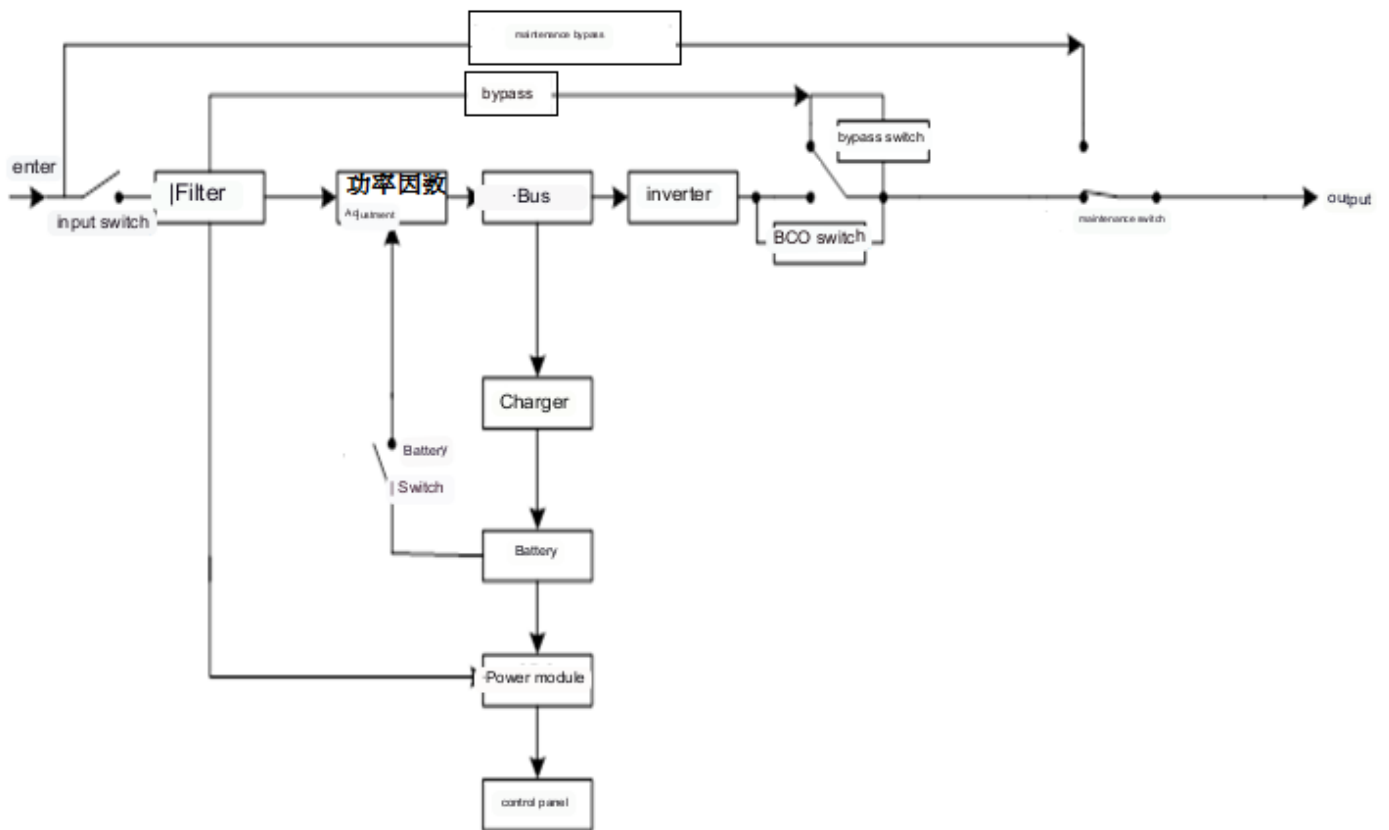
Distributed power supply system, which is an uninterruptible power supply product designed and developed for a new generation of green data centers. It combines the mature and stable control technology of traditional UPS with new lithium battery energy storage technology, and has the characteristics of small size, light weight, high intelligence and easy deployment. It is generally applicable to power supply application scenarios such as distributed data centers, data centers with limited load bearing, phased deployment data centers, rapid deployment data centers, and integrated cabinets.

1.1 System Block Diagram



Schematic diagram of DPS system

As an online distributed power system, the product is suitable for double-conversion topology, including functional modules as shown below.



1.2 Composition of Distributed Power System

The distributed power supply is specially designed for standard 19-inch cabinets. It adopts a uniform design of 750mm deep and 438mm wide. With the front fixed mounting ears and handles, the distributed power system can be easily deployed and installed in the cabinet. Disassemble and replace .

Distributed power supply DPS products are mainly composed of three parts: host power module , battery module, and external host cabinet power distribution module .



Distributed machine renderings

1.2.1 Host power module

The LED light and LCD display on the front of the power module of the main engine are friendly to the man-machine interface, and the display content is clear and clear. There are four buttons at the bottom of the screen, which can realize the viewing and setting of various parameters of the device under simple operations.



Host power module front end



Host power module backend

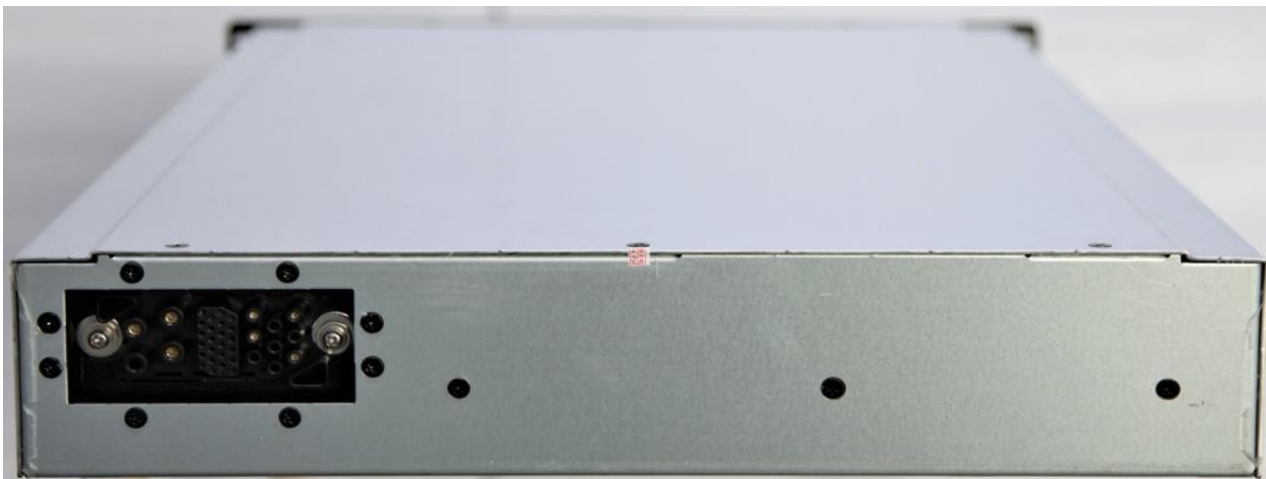
1.2 .2 Battery module

Aveda distributed power supply DPS products all use lithium batteries under perfect BMS management for energy storage backup. With the precise management and protection of custom-developed BMS, the operation of DPS series products becomes safer and more reliable.

The DPS battery module is equipped with panel handles and screws, which further facilitates installation and fastening and battery module replacement.



battery module front



battery module rear

1.2.3 Main cabinet power distribution module

of the main cabinet of the distributed power supply is equipped with a power interface . When the equipment is running normally, the main cabinet module provides

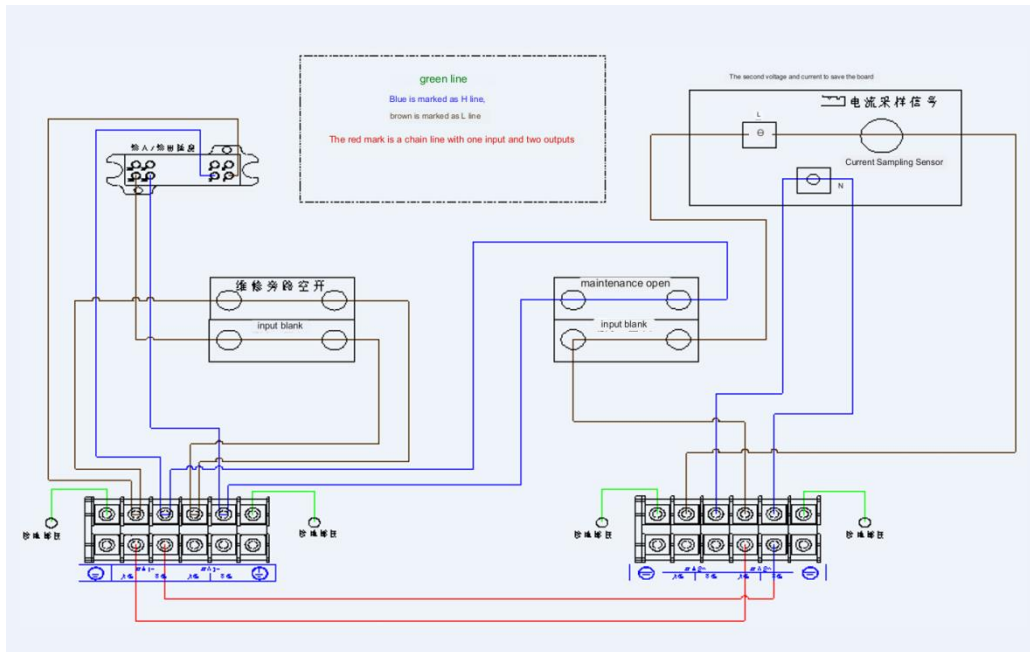
power to the internal power module for work. The rear-end maintenance switch is closed , and the mains is used to supply power to the load temporarily. After the equipment is replaced, the maintenance switch is turned off . (The maintenance switch at the back end of the DPS is designed with a micro switch detection function. As long as the maintenance switch cover is opened, the DSP will detect that the DPS will be transferred to the bypass mode to prevent the device from being transferred to the maintenance state when the DPS is running normally.)

of the main cabinet of the distributed power supply is equipped with four time-sharing output sockets, and the time-sharing output time of each channel can be set on the man-machine interface, making the power guarantee of the distributed power supply for the load more reliable.

1.2 .3 .1 Scope of application of main cabinet power distribution module

- The power distribution module of the main cabinet has two-way input and two-way output functions. It is suitable for customers who do not have very high requirements for power supply safety, and one of the load dual power supply can be directly supplied with mains power (the capacity of the distributed power system should match the capacity of the cabinet.).
- The power distribution module of the main cabinet has the function of one input and two outputs, which is suitable for the environment where customers have very high requirements for power supply safety, and the dual-circuit power supply of the load needs to pass through the distributed power system environment (need to increase the capacity of the configured distributed power system by more than 50 %) .

1.2 .3 .2 Main cabinet power distribution module wiring diagram



Two-in two-out or one-in two-out wiring diagram

1.2 .3 .3 Rendering diagram of main cabinet power distribution module



The front end of the power distribution module of the main cabinet (the main power module and the battery module are hot-swappable)



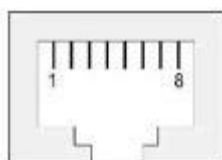
Rear end of the power distribution module of the main cabinet (four-way time-sharing output socket)

1.3 Communication interface and communication protocol

Introduction: The communication between the communication board and the battery BMS in the distributed power supply system is the CAN protocol; the communication between the communication board and the control module is the RS485 protocol; the communication between the communication board and the host computer is the RS485 protocol;

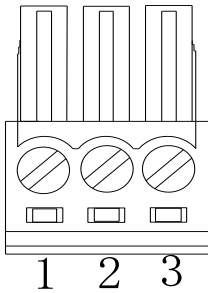
Our distributed power supply system provides host computer software interface, communication interface: USB, RJ45*2, composite terminal block, its communication protocol is Modbus, using the Modbus communication protocol requires RS485 to TCP/IP for communication deployment, as follows Introduces the networking mode using the Modbus communication protocol.

1.3.1 Distributed power supply (DPS) communication interface RJ45--485 interface pin wiring definition



Terminal	1	2	3	4	5	6	7	8
Signal								
RS485	GND			B- ₋	A+	5V		

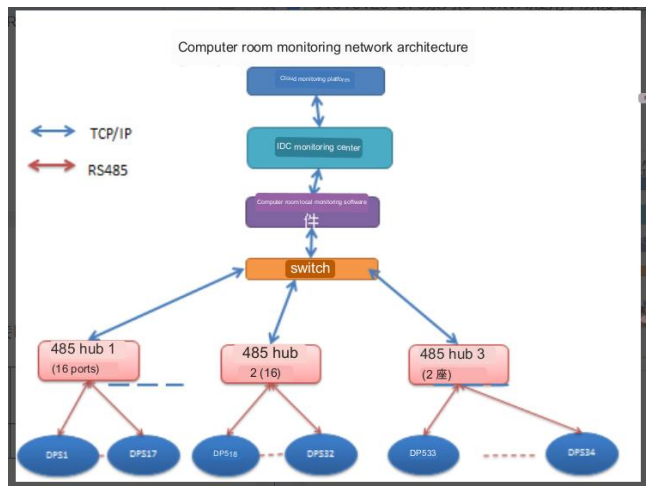
1.3.2 Distributed power supply (DPS) communication interface composite terminal --485 interface pin wiring definition



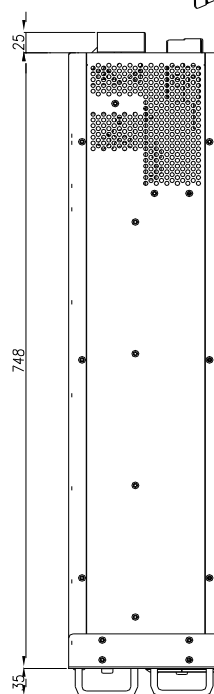
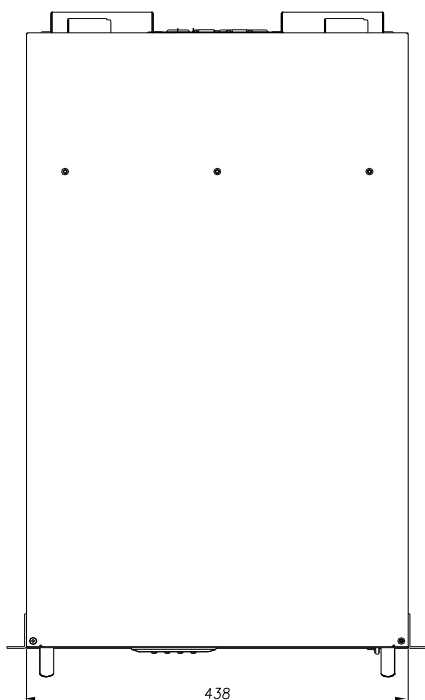
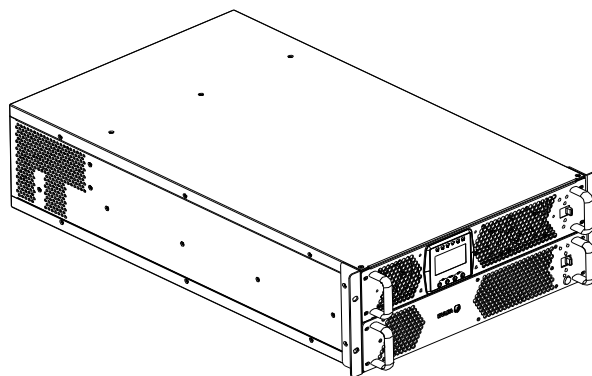
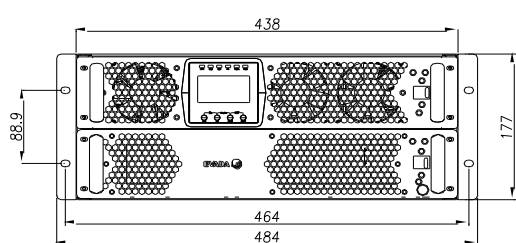
Terminal \ Signal	1	2	3
RS485	A+	B-	GND

1.3.3 Networking mode:

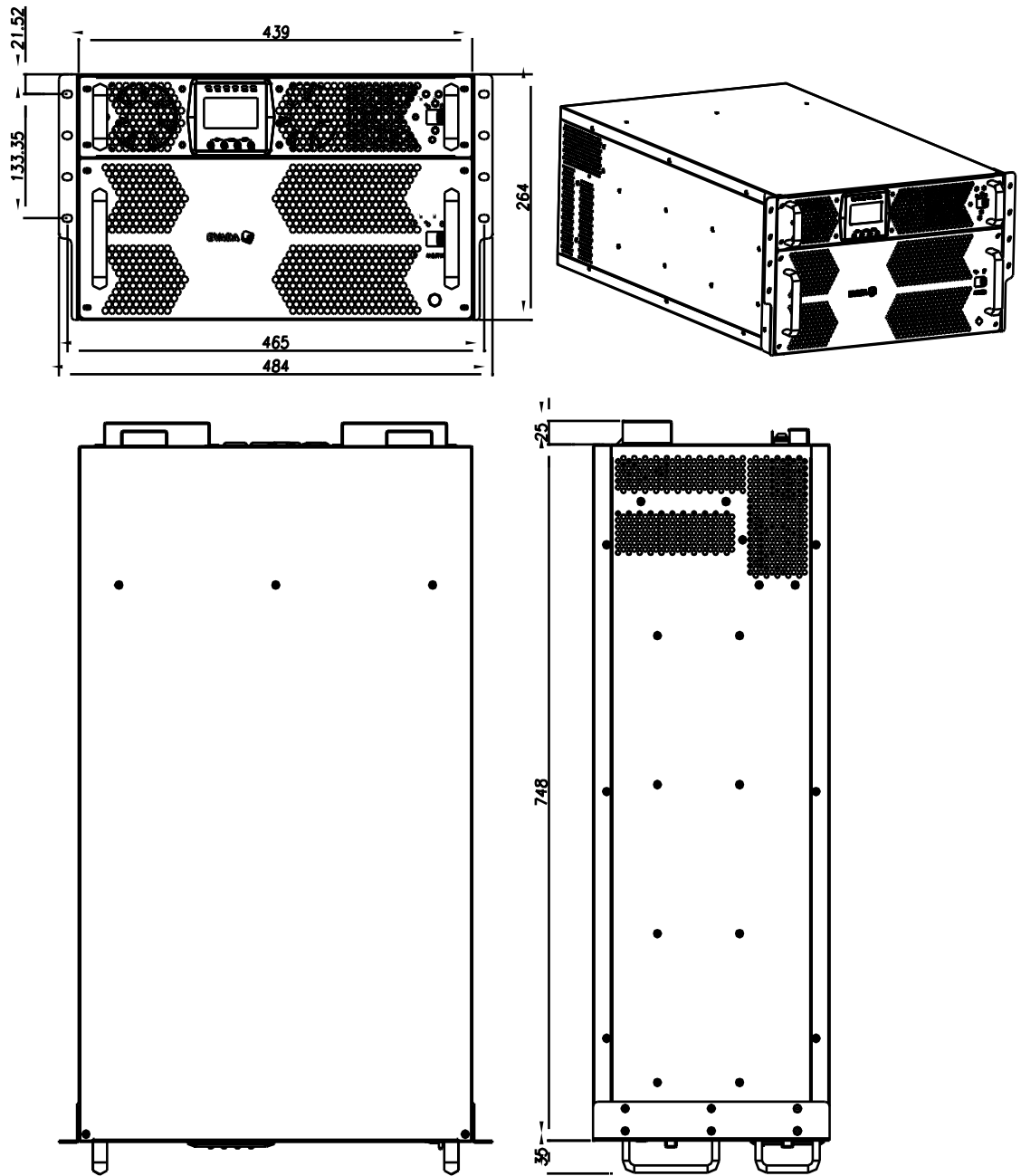
Use the communication board to form a network through the RS485 protocol, the block diagram is as follows:



1.4 Dimensions



Appearance and dimension drawing of DPS-1106A distributed power supply



Appearance and dimension drawing of DPS-1110A distributed power supply

1.5 Technical Parameters

		capacity	6000VA / 5400W	10 000 VA / 90 00W
Input	Input voltage	220VAC		
	voltage range	1 2 0~ 286 Vac @ (0~ 5 0%) load 1 6 0~ 286 Vac @ (5 0~ 75 %) load 176~ 286 Vac @ (75 ~100%) load		
	Frequency Range	46Hz ~ 54Hz @ 50Hz system 56Hz ~ 64Hz @ 60Hz system		
	power factor	≥ 0.99 at 100% load		
Output	The output voltage	208/220/230/240VAC		
	Voltage accuracy	$\pm 1\%$		
	Frequency range (synchronous range)	46Hz ~ 54Hz @ 50Hz system 56Hz ~ 64Hz @ 60Hz system		
	Frequency Range (Battery Mode)	50Hz \pm 0.1Hz or 60Hz \pm 0.1Hz		
	power factor	≥ 0.9		
	crest factor	3:1max		
	harmonic distortion	$\leq 1\%$ @ 100% linear load; $\leq 4\%$ @ 100% non-linear load		
	switching time	mains \longleftrightarrow battery	0ms	
Inverter bypass \longleftrightarrow		0ms		
Inverter \longleftrightarrow ECO		<10ms		
Operation modes	Input and output format	1 way input 2 way output or 1 way input 2 way output		
Efficiency	Mains mode	> 95 %		
	battery mode	> 93 %		
Battery	Battery Type	2 05 V lithium battery		
	battery capacity	10AH/1 4AH / 2 1AH /2 8AH		
Physical parameters	Dimensions DxWxH(mm)	750 x 4 40 x 17 7 (4U)	750*440 * 264 (6U)	
	Host net weight (kg)	34		
	Battery module (kg)	38(14Ah)	80(28Ah)	
Environment	Storage temperature	-25~55°C		
	Operating temperature	0 ~ 45°C		
	Working humidity	<95 % without condensation		
	working altitude	<2000m		
	working noise	Less than 55dB @ 1 meter		
Monitoring	Intelligent RS-485	Support Windows® 2000/2003/XP/Vista/2008, Windows® 7/8, Linux and MAC		

*In CVCF mode, the output power will be reduced to 60%; when the output voltage is set to 208VAC, the output power will be reduced to 90%.

**If the distributed power system is installed and used in an environment with an altitude exceeding 2000 meters, the output power should be calculated to decrease by 1% every 200 meters.

2. Installation and use

Please read the product manual and safety instructions carefully before installing and using this product

2.1 Preparations before installation

Please open the package and check whether the following items are complete. The package contains the following items:

- Distributed power system host 1 (including 1 battery module)
- 1 user manual
- One certificate
- Warranty card 1 piece
- Parallel connecting line 1 piece
- Chassis hanging ear buckle screws 4 sets



The place where the distributed power system product is stored must be dry and ventilated.



When the distributed power system is directly sent from a cold environment to a warm environment such as a room, condensation may occur. At this time, be sure to wait until it is completely dry before installing. For this reason, after moving to the installation site, please place it for at least 2 hours to allow the distributed power system to adapt to the environment before installing it.



This distributed power system is forbidden to be installed in an environment with water or humidity nearby.



This distributed power system is forbidden to be installed in direct sunlight or places with heaters nearby.

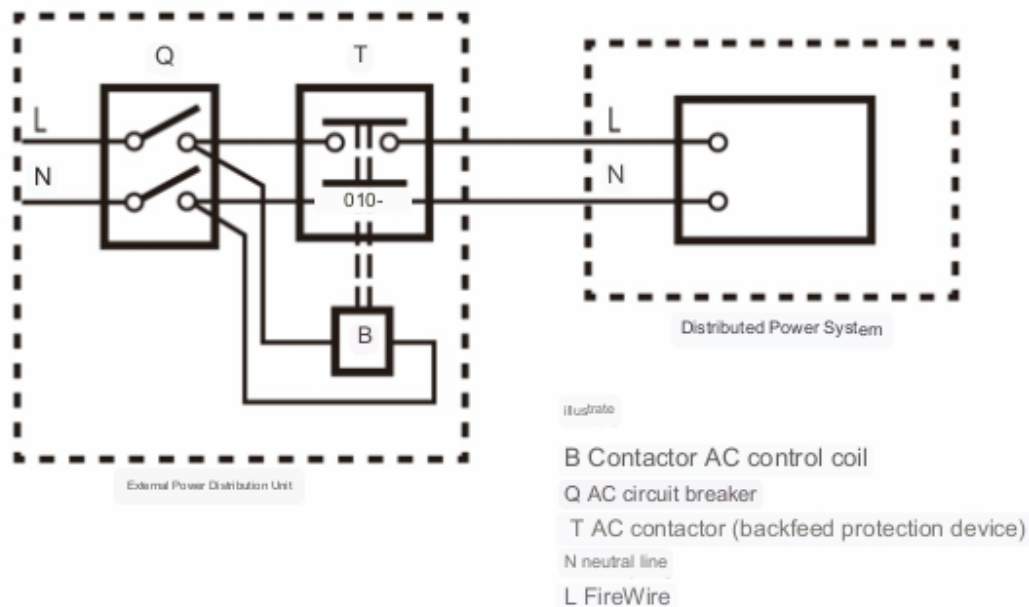


It is forbidden to block or cover the ventilation holes on the casing of the distributed power system.

Note : Before installation, please check the contents of the package to make sure there is no abnormality that seems to be broken or damaged. In case of any damage or missing parts, do not use this product, and notify the carrier and your dealer immediately. Please keep the original packaging materials for future use.

2.2 Stand-alone device installation

2. 2.1 Connection Precautions



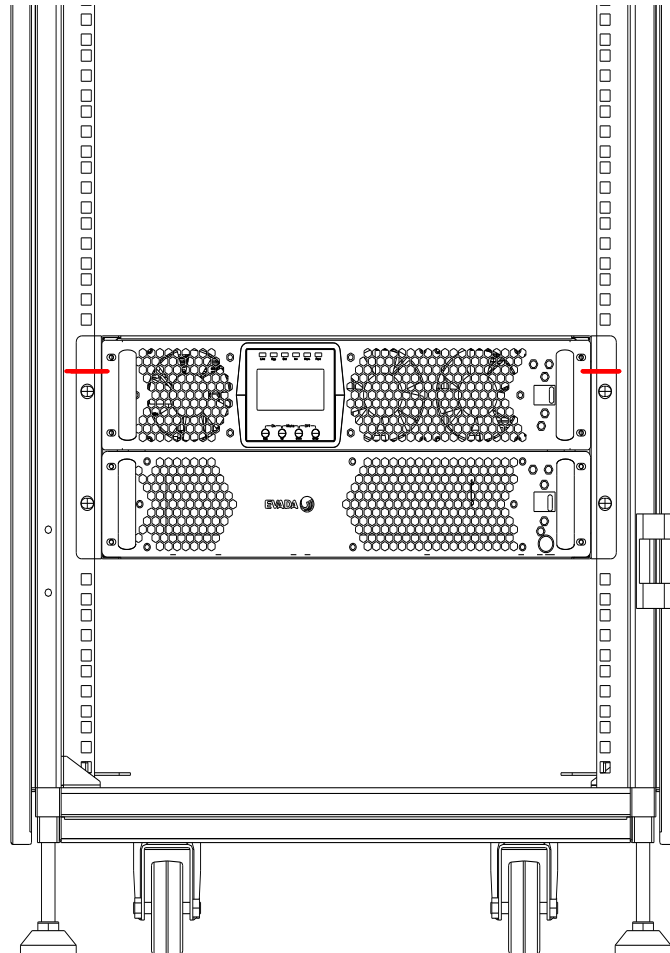
- There is no backfeed protection device installed inside the power system , please install an isolation device before use, and the isolation device must be able to carry the input current of the distributed power system.
- The distributed power system must be grounded.
- It is forbidden to connect devices that can cause overload of the distributed power system (such as high-power motor equipment) to the output of the distributed power system.
- Lines such as power cords should be routed out of places where they could be stepped on or tripped over.
- The ventilation holes on the enclosure of this distributed power system must not be blocked or covered. The place where the distributed power system is installed must

be well ventilated, and it must be confirmed that there is sufficient ventilation space around the distributed power system host.

- This distributed power system can only be installed by professional maintenance personnel.
- Building systems shall be provided with short circuit protection.
- The building system should be equipped with a lumped emergency switch so that the power supply of the distributed power system to all loads can be cut off in time when necessary.
- The distributed power system must be grounded before the wiring connection between the distributed power system and the building system.
- Installation and wiring must comply with local electricity laws and regulations.
- this distributed power system must be single-phase and grounded.
- It is not recommended that this distributed power system be used for life-sustaining application instruments, because when the machine fails, it may cause these instruments to malfunction. Please do not use it in an environment where flammable gases and air, oxygen or nitrous oxide exist Use this machine.
- Please ensure that the output ground terminal of the distributed power system is really connected to the ground.
- The distributed power system will be connected to a DC power source (ie lithium battery), so even if the distributed power system is not connected to the mains, the output terminal block may still be charged.

2. 2. 2 Putting the main chassis on the shelf

Install the main chassis into the installed bracket rails, and fix the main chassis mounting ears with cabinet screws .



2. 2. 3 Distributed power system cable connection

Installation and wiring must comply with local electrical regulations, and the following instructions should be carried out by professional electricians:

- 1) Confirm that the distribution lines and circuit breakers are sufficient to support the capacity of the distributed power system to avoid electric shock or fire accidents.

Note: Do not use the wall socket as the input power of the distributed power system (its rated current is less than the maximum input current of the distributed power system), otherwise the socket may be burned .

- 2) Before installation, disconnect the main power switch of the power distribution cabinet.
- 3) All load devices need to be powered off before connecting to the distributed power system.
- 4) Prepare the wire according to the following comparison table:

model	enter	output	land
6K	6mm ²	6mm ²	6mm ²
10K	10 mm	10 mm ²	10 mm ²

Note 1: 6K wire must be able to withstand a current exceeding 40A. Therefore, it is recommended to use 6mm². Or a higher specification wire to take into account safety and efficiency.

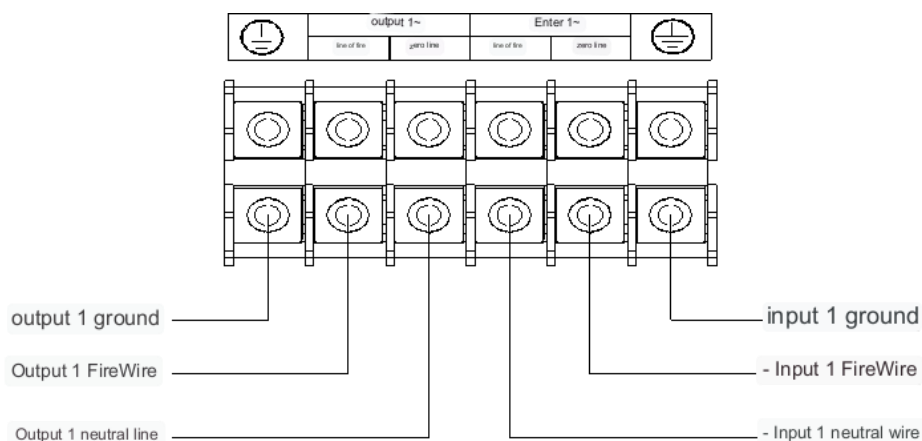
Note 2 : 10K wire must be able to withstand a current exceeding 63 A. Therefore, 10 mm² is recommended . or higher specification wires for both safety and efficiency

Note 3 : The color of the wire must comply with the local electrical regulations.

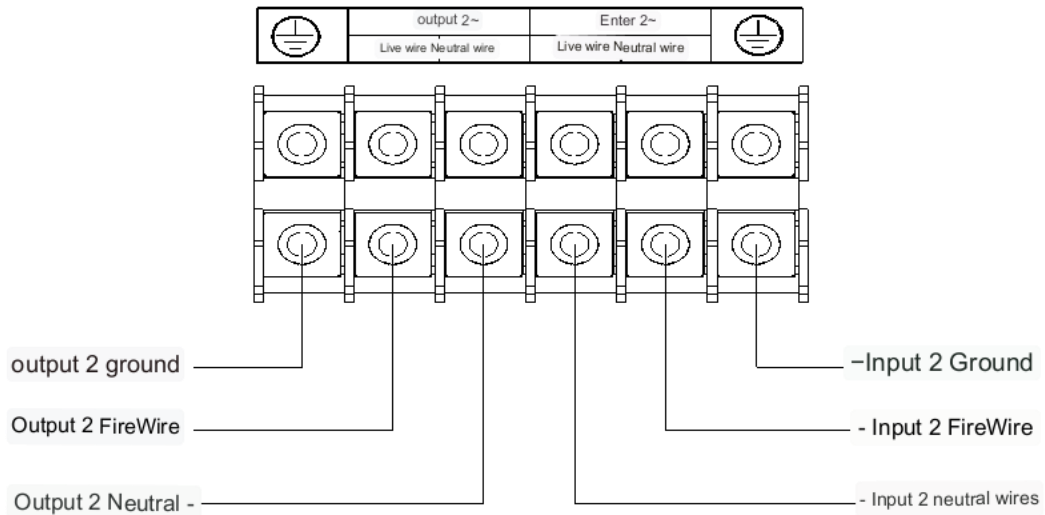
The distributed power system has two wiring modes : two inputs and two outputs, and one input and two outputs.

When deploying a distributed power system, the on-site engineer must first confirm the deployment plan of the on-site distributed power system, and then connect the cables according to the requirements after clarifying the deployment plan.

- 5) Remove the terminal block cover on the rear panel of the distributed power system . Then, wire according to the schematic diagram of the terminal block as follows:
(When wiring, please connect the ground wire first. When removing the wiring, keep the ground wire until the end !)

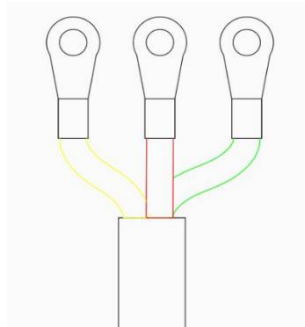


Terminal Block 1 Wiring Diagram



Terminal Block 2 Wiring Diagram

Connection terminal production: strip off the black sheath of the cable, the length of the leaked cable is about 3cm, the cable insulation is peeled off, the length of the leaked wire is about 1cm, and the cold-pressed terminal is crimped to the stripped copper wire.



! When crimping cold-pressed terminals, make sure that the cables are crimped firmly, and you must carefully check the crimping effect after crimping.

After the cold-pressed terminal is fabricated, install the cold-pressed terminal on the terminal block of the main chassis according to the wire sequence.

! When connecting cables, please carefully confirm the wire sequence, live wire (L), neutral wire (N), ground wire (PE), and do not connect them incorrectly.

Inspection after installation: After the cable connection is completed, check whether the sequence of the cable connection is correct, and use a multimeter to measure whether there is a short circuit between the two inputs and outputs.

2. 2. 4 Power on the device



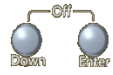
It is forbidden to disconnect the grounding cable of the distributed power system or the grounding cable of the building system, otherwise the protective grounding of the distributed power system and the connected load will be invalid .



The characteristic of the distributed power system is that it contains an internal battery, so even if the distributed power system is not connected to any building wiring system, its output terminal block may still be charged .



If you want to completely disconnect the distributed power system, please press the key first , and then disconnect the main power supply



Prevent any liquid or other foreign matter from entering the distributed power system .

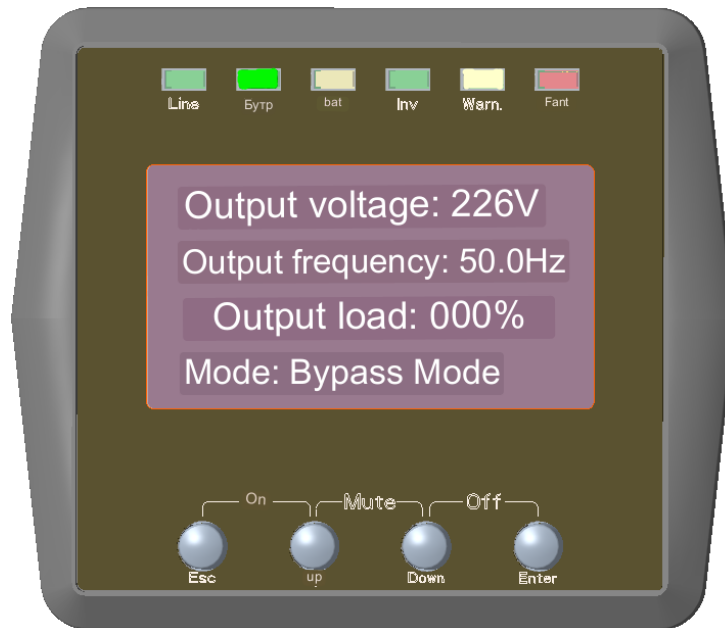
Check before power-on : Use a multimeter to measure the voltage between the neutral and live wires at the front end of the AC input circuit breaker of the top cabinet, close the circuit breaker when the voltage is normal, and then use a multimeter to measure the zero and live wires at the rear end of the AC input circuit breaker of the top cabinet voltage between.


Power on the distributed power system: When the voltage is normal (176-264V), close the AC input circuit breaker of the distributed power system to complete the power on of the equipment.

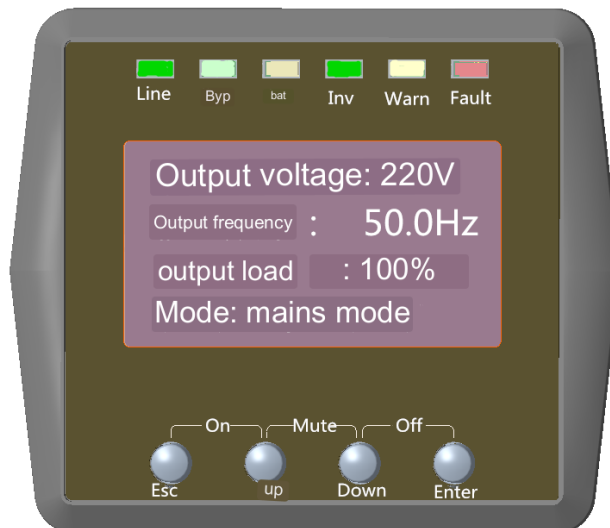
The second power-on method is the same as above.

Note : Before powering on, lock the latches on the front of the power module of the host and the battery module, otherwise the distributed power supply cannot be turned on, and the battery module cannot be opened.

After the equipment is powered on, the distributed power system will run in bypass mode. At this time, the green indicator light "BYP" on the front panel of the distributed power system is on.



Press the front panel of the distributed power system  key, the buzzer will make a sound, and then the distributed power system enters the mains mode . At this time, the green indicators "LINE" and "INV" on the front panel of the distributed power system are on.



Check after power-on : Use a multimeter to measure and record the input and output voltage values at the two terminal blocks of the distributed power system.

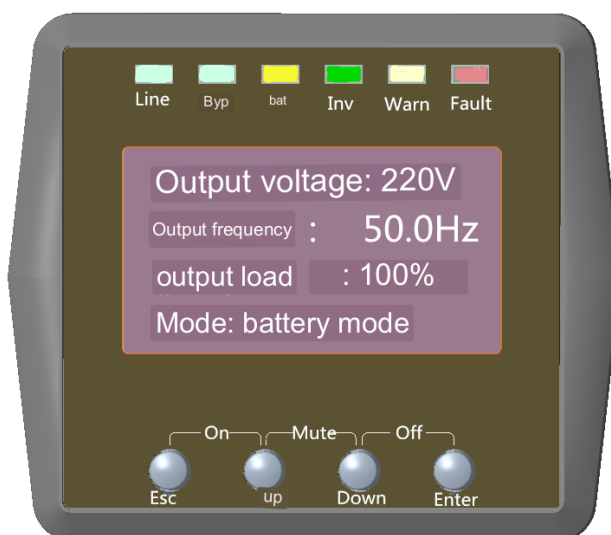
Note: After the distributed power system is powered on and enters the mains mode, if there is a battery disconnection alarm, check and lock the latch on the front panel of the battery module . When the green indicator light is on, the battery module turns on the

distributed power In the inspection mode, the distributed power system runs normally after the self-inspection is completed.

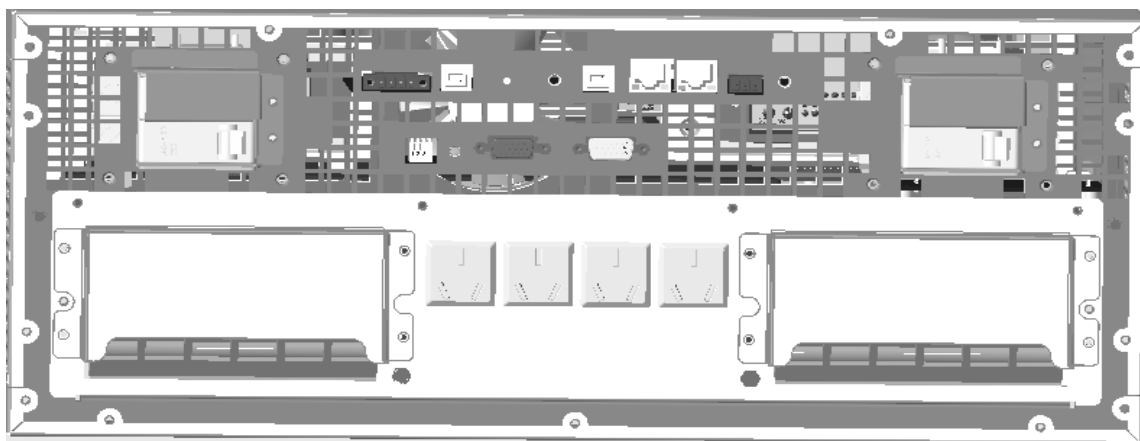
2.2.5 Battery discharge test

After the equipment is powered on and running normally, cut off the first AC input circuit breaker of the distributed power system. At this time, the distributed power system enters the battery mode (as shown in the figure below), and the "BAT" and "INV" on the front panel of the distributed power system are yellow and green .

When the indicator light is on , use a multimeter to measure the voltage of the first output terminal block and record the data.



After making sure that all the measured data are normal, fix the protective cover of the terminal block on the rear panel of the chassis.



3. User operations

3.1 LED indicator LCD display

The distributed power panel adopts LCD liquid crystal screen and LED light display, and the LCD display is located on the left side of the front panel, including LCD liquid crystal, 6 LED working indicators and 4 control buttons



LED indicators:

6 LED lights on the front panel to indicate the operating status of the distributed power system (DPS):

indicator light working condition	Line indicator	Byp indicator	Bat indicator	Inv indicator	Warning light	Fault indicator
Mains mode	Bright	off	off	Bright	off	off
battery mode	flash	flash	Bright	Bright	flash	off
Output Bypass Operation	off	Bright	off	off	off	off
Mains mode output overload	Bright	off	off	Bright	flash	off
Battery Mode Output Overload	off	off	Bright	Bright	flash	off

Abnormal battery input (with bypass)	off	Bright	flash	off	flash	off
Fault (with bypass)	off	Bright	off	off	flash	Bright
Fault (no bypass)	Bright	flash	Bright	off	flash	Bright

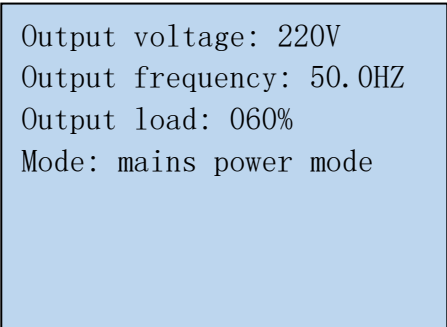
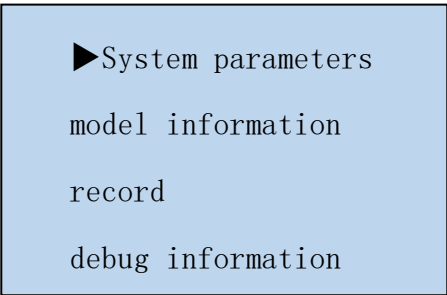
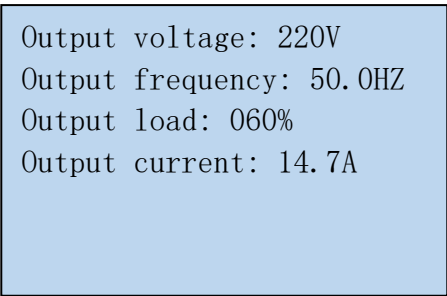
Key operation:

name	Function Description
key "Esc"	Back to previous menu
Button "Up"	Used to page up/down to view data
Button "Down"	
Press "Enter"	Enter system parameters
Button "On"	Press and hold the "Esc" and "Up" keys at the same time to start the machine manually
Button "Off"	Press and hold the "Down" and "Enter" keys at the same time to manually shut down
Button "Mute"	Press and hold the "Up" and "Down" keys at the same time to set to mute
parameter settings	Press and hold the "Esc" and "Down" keys at the same time to enter the setting interface

LCD display:

The LCD liquid crystal display provides a friendly man-machine operation interface for the UPS, allowing you to view operating parameters, perform user settings, and view debugging information.

The operation is as follows:

Main interface	Parameter introduction
	<p>Output voltage: 220V</p> <p>Output frequency: 50.0HZ</p> <p>Output load: 60%</p> <p>The equipment works in mains power mode</p>
<p>Press the "Enter" key to enter the system parameter selection interface</p>	<p>Parameter introduction</p>
	<p>Press "Up" or "Down" to select the required parameter information and press "Enter" to enter;</p> <p>System parameters: view output, input, battery, bus parameters</p> <p>Model information: view trademark, type, capacity, program version</p> <p>Event record: View device operation records</p> <p>Debugging information: View the current protocol in use</p>
<p>Press the "Enter" key to enter the system parameters to select the output parameters</p>	<p>Parameter introduction</p>
	<p>Output voltage: 220V</p> <p>Output frequency: 50.0HZ</p> <p>Output load: 60%</p> <p>Output current: 14.7A</p>

On the output parameter interface, press the "Down" key to enter the output power interface	Parameter introduction
<div data-bbox="284 309 732 600" style="border: 1px solid black; background-color: #e0f0ff; padding: 5px;"> <p>Power: 03240W Total power: 03350 VA Inverting current: 14.9A Average current: 14.7A</p> </div>	<p>Output power: 3240W</p> <p>Total output power: 3350 VA</p> <p>Inverter current: 14.9 A</p> <p>Average current: 14.7 A</p>

Input parameter interface	Parameter introduction
<div data-bbox="284 763 732 1055" style="border: 1px solid black; background-color: #e0f0ff; padding: 5px;"> <p>Input voltage: 226V Input frequency: 49.9HZ Input current: 15.3A Input power: 3620W</p> </div>	<p>Input voltage: 226V</p> <p>Input frequency: 50.0HZ</p> <p>Input current: 15.3A</p> <p>Input power: 3620W</p>

Press the "Down" key on the parameter input interface to enter the bypass parameter interface	Parameter introduction
<div data-bbox="284 1249 732 1541" style="border: 1px solid black; background-color: #e0f0ff; padding: 5px;"> <p>Bypass voltage: 226 V Bypass frequency: 49.9HZ Synchronous frequency: 49.9HZ</p> </div>	<p>Bypass voltage: 226V</p> <p>Bypass frequency: 49.9HZ</p> <p>Bypass frequency: 49.9HZ</p>

Battery parameter interface	Parameter introduction
<div data-bbox="284 1659 732 1951" style="border: 1px solid black; background-color: #e0f0ff; padding: 5px;"> <p>Battery voltage: 218 V Battery current: 00.0A</p> </div>	<p>Battery voltage: 218V</p> <p>Battery current: 00.0A</p>

Bus parameter interface	Parameter introduction
<div data-bbox="284 264 732 555" style="border: 1px solid black; background-color: #e1f5fe; padding: 10px;"> PBUS voltage: 369V NBUS voltage: 370 V PFC temperature: +23° C INV temperature: +22° C </div>	<p>PBUS voltage: Positive side bus voltage 369V</p> <p>NBUS voltage: negative side bus voltage 370V</p> <p>PFC temperature: rectification part temperature +23° C</p> <p>INV temperature: inverter part temperature +22° C</p>

Press the "Up" or "Down" key on the main interface to view the fault code and warning code	Parameter introduction
<div data-bbox="284 1099 732 1391" style="border: 1px solid black; background-color: #e1f5fe; padding: 10px;"> Trouble code: 572 Rectifier fan </div>	<p>Fault code: 000 means that the device has no fault warning</p> <p>When the device fails, it will display specific fault information and codes (such as: 572 code rectifier fan failure)</p>
<div data-bbox="284 1514 732 1805" style="border: 1px solid black; background-color: #e1f5fe; padding: 10px;"> Alarm code: 00000006 01- Mains abnormal 02-Bypass exception </div>	<p>Alarm code: 00000000 means no alarm, (the 8-digit value of 00000000 is 32 digits in hexadecimal)</p> <p>When the device has an alarm, it will display specific alarm information and simple codes (such as: 01 code mains abnormality)</p>

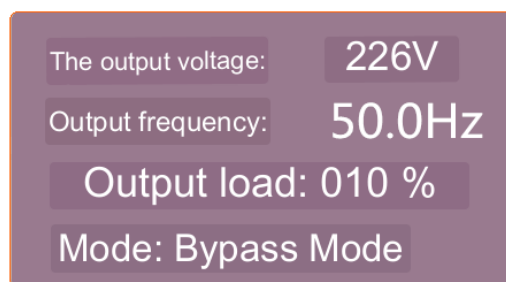
3.2 Sound alarm

illustrate	siren status	Mute
Distributed Power System (DPS) Status		
bypass mode	Beep every 1 minute	Muteable _
battery mode	Beep once every 3 seconds for mains abnormality alarm	
failure mode	Keep beeping	
alarm		
overload	two beeps per second	Muteable _
battery low voltage	1 second beep	
other alarms	2 seconds beep	
Fault		
all faults	Keep beeping	Muteable _

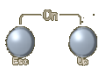
3.3 Stand-alone operation

3.3 .1 Mains Mode Startup

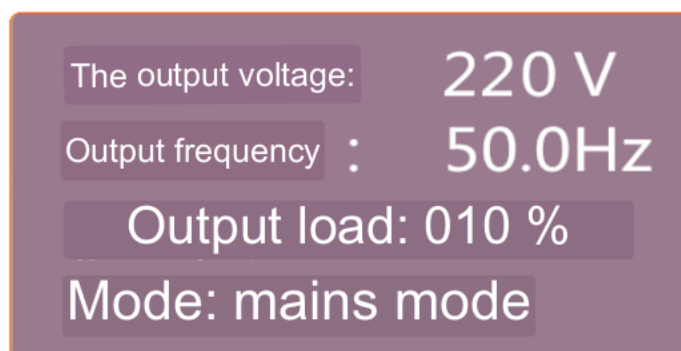
(1) After confirming that the system wiring is correct, switch the mains input circuit breaker to <ON>, at this time the internal working power of the distributed power system (DPS) will be automatically turned on, the fan will start running, and the distributed power system (DPS) will enter the upper power mode; after a few seconds, the distributed power system (DPS) will operate in bypass mode and output through the bypass. See figure below (bypass mode)



Note: When the distributed power system (DPS) is running in bypass mode, it directly supplies power to the load through the bypass. At this time, the load cannot be completely protected by the distributed power system (DPS). After DPS) works in the mains mode, the load will be fully protected. In order to protect your equipment, you need to enable the Distributed Power System (DPS); please refer to the following steps for related enabling operations.



(2) Press and hold the key for more than 3 seconds, and after the buzzer beeps, the distributed power system (DPS) will enter the mains mode (usually called 'starting'). See the figure below (mains mode):



(3) If the mains input is abnormal after starting up, the distributed power system (DPS) will directly enter the battery mode to avoid interruption of power supply to the


load; if there is an abnormal mains power, please refer to troubleshooting.

Note: When the distributed power system (DPS) is in battery mode, it will automatically shut down after the battery power is exhausted. If the mains power is restored, the distributed power system (DPS) will automatically restart into the mains mode.

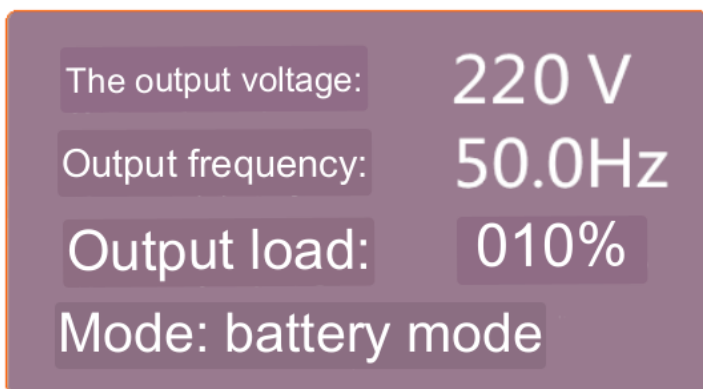
3.3 .2 Power on without mains power (battery mode)

(1) Confirm that the battery pack is inserted into the main box of the distributed power system (DPS).

(2) Manually press the switch button on the battery module panel for more than 8 seconds to turn on the battery and the green indicator light is on .

(3) Press the "Enter" key to supply power to the distributed power system (DPS), and the distributed power system (DPS) enters the power-on mode. After a few seconds, the distributed power system (DPS) enters standby mode, and then press  Press the button for more than 3 seconds to turn on the machine, and the buzzer will sound once.

(4) After a few seconds, the distributed power system (DPS) will turn on and enter battery mode. See the picture below (battery mode):



3.3 .3 Precautions for connecting equipment (load)

After the distributed power system (DPS) is turned on, it can supply power to the equipment (load):

(1) Please turn on your equipment (load) one by one; at this time, the LCD panel will display the current load condition.

(2) If there are inductive loads connected such as printers, it is necessary to calculate the inrush current when these loads start to confirm whether the capacity of the distributed power system (DPS) is sufficient to support such loads, because generally such loads require Startup consumes a lot of power.

(3) When the distributed power system (DPS) is overloaded, the buzzer will sound twice per second. Please reduce some load immediately at this time. It is recommended that the load should not exceed 80% of the rated power to ensure safe and reliable operation of the system.


(4) In mains mode, if the distributed power system (DPS) is overloaded for longer than the acceptable time, the distributed power system (DPS) will automatically switch to bypass mode. After the overload condition is removed, the distributed power system (DPS) automatically returns to mains mode. If the overload occurs 3 times within half an hour, it will be locked in the bypass mode, and only after manually pressing the power button can it be turned on again to enter the mains mode. If the overload occurs for longer than an acceptable time in battery-powered mode, the distributed power system (DPS) will assume a fault condition.

3.3.4 Battery Charging

After connecting the distributed power system (DPS) to the mains, the charger will automatically charge the battery no matter it is in bypass mode or in the mains mode. After the battery is fully charged, the battery will disconnect the charging relay and the battery will stop charging.

3.3.5 Battery Mode Operation

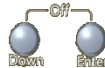
(1) When the distributed power system (DPS) is in the battery mode, the buzzer alarm will sound every 3 seconds ; the LCD will send out the mains abnormal alarm information, and when the battery voltage drops to the alarm level, the alarm tone will be shortened to every second One sound to remind the user that the battery power is too low and the distributed power system (DPS) is about to shut down automatically. In the latter case, users can turn off some non-critical equipment to extend the backup time. If no other non-critical loads can be shut down, the main load must be shut down as soon as possible to protect equipment and preserve data. Otherwise, there will be risks such as data loss or load power failure.

(2) In battery mode, if the alarm sound is annoying, you can press  the key to turn off the alarm sound.

(3) The length of power backup time depends on the capacity of the battery.

(4) Battery backup time will vary depending on the ambient temperature and the type of load equipment.

3.3.6 Shutdown in mains mode

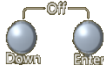
(1) Press the key of the distributed power system (DPS) for more than  3 seconds, the buzzer will beep once, then the inverter will be turned off, and the distributed power system (DPS) will enter the bypass mode.

Note 1: If the distributed power system (DPS) has been set to enable bypass output, even if you turn off the distributed power system (DPS) (inverter), the mains power will pass through the bypass output when the mains is normal. output directly.

Note 2: After the distributed power system (DPS) is turned off, the distributed power system (DPS) supplies power in a bypass mode; once the mains power fails, the equipment connected to the distributed power system (DPS) is at risk of power failure immediately .

(2) In bypass mode, the output voltage of the distributed power system (DPS) still exists. Only turn off the input circuit breaker, the distributed power supply (DPS) turns to standby mode , and after one minute, the distributed system (DPS) system discharges the residual voltage of the equipment and enters the power-off state. After 30 seconds, the LED lights and LCD screen When the indicator light of the battery module is off, it means that the distributed power system (DPS) is completely shut down.

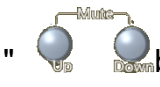

3.3.7 Shutdown in battery mode

(1)  Press the button for more than 3 seconds to turn off the distributed power system (DPS), and the buzzer will sound once.

(2) The distributed power system (DPS) will interrupt the power output , and the distributed power supply (DPS) will turn to standby mode . After one minute, the

distributed system (DPS) system will enter the power-off state after discharging the residual voltage of the equipment, and it will last for 30 seconds. The rear LED light and LCD screen are off, and the battery module indicator light is off, which means that the distributed power system (DPS) is completely shut down

3.3.8 Buzzer Mute

Press the " Mute "  button for more than 1 second to achieve mode mute, press the " Mute "  button again to cancel the mute.

3.3.9 Operation in alarm state

(1)When the <Warn> LED indicator is on and the buzzer sounds once in 2 seconds, it means that some problems have occurred in the operation of the distributed power system (DPS). Users can find out the warning code from the LCD panel, please check the warning code table and follow the troubleshooting method to solve the problem.

(2)Alarm sound can be turned off to mute before troubleshooting .

3.3.1 Operation in 0 fault mode

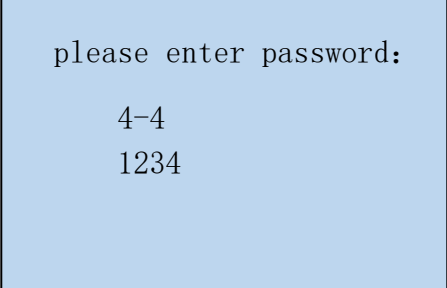
(1)When the <Fault> LED indicator is on , the indicator light is on, and the buzzer beeps for a long time, which means that there is a serious failure in the distributed power system (DPS) . The fault code can be found on the LCD panel , please check the alarm code table and follow the troubleshooting method to solve the problem.

(2) When this kind of failure occurs, please check the load, wiring, ventilation, mains power, battery and other parts immediately. Never attempt to restart the Distributed Power System (DPS) until the problem is resolved. If the problem cannot be solved, please contact your dealer or service personnel immediately.

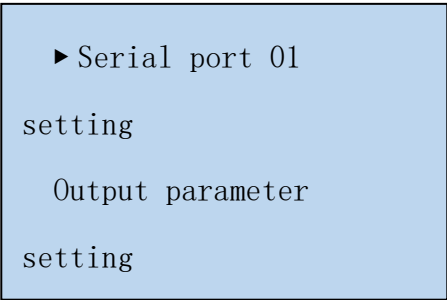
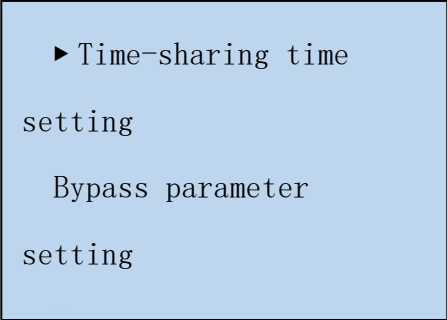
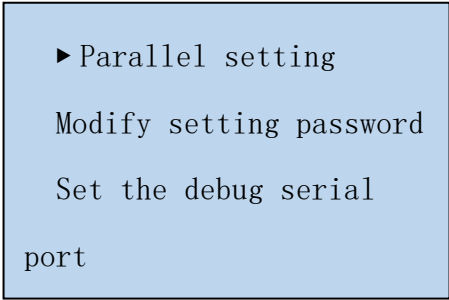
(3) If the situation is urgent, please disconnect the mains, battery, and output immediately to avoid further expansion of the danger.

3.4 LCD settings

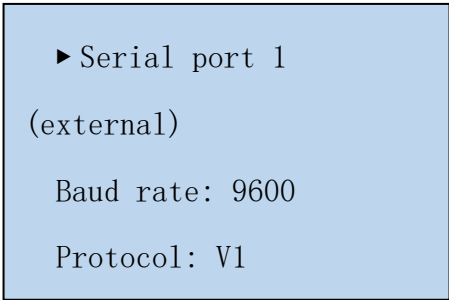
Press the Esc + Down buttons at the same time, the LCD display enters the setting interface, and the setting parameters are as follows:

Press the "Esc" or "Down" key at the same time to enter the parameter setting interface	Parameter introduction
 <p>please enter password: 4-4 1234</p>	<p>Press the "Enter" key to input numbers, press the "Up" key to add numbers, press the "Down" key to subtract numbers, and press the "Esc" key to delete the entered numbers when the input is wrong, and then re-enter. Press "Enter" to confirm the next digit, customer password: 1234, the customer password can be modified through the interface,</p> <p>When the wrong password is entered, the fourth line will have a prompt of "wrong password!"</p>

Enter the main menu of the setting interface after entering the correct password

 <p>▶ Serial port 01 setting Output parameter setting</p>	<p>Press the "Up" and "Down" keys to select the desired menu, press the "Enter" key to enter the setting interface of the corresponding menu</p>
 <p>▶ Time-sharing time setting Bypass parameter setting</p>	
 <p>▶ Parallel setting Modify setting password Set the debug serial port</p>	

Select the serial port 01 setting and press the "Enter" key to enter the interface

 <p>▶ Serial port 1 (external) Baud rate: 9600 Protocol: V1</p>	<p>Press the "Up" and "Down" keys to select the content that needs to be set, press the "Enter" key to confirm, the ▶ cursor on the left will become flashing, and then press the "Up" and "Down" keys to select the modified data. The baud rate is 1200~1.17M, the protocol has 11 options, the address is 001~255, and then select the data you want, and then press "Enter" to confirm, the cursor does not blink, indicating that the setting is successful</p>
--	---

Select the output parameter setting and press the "Enter" key to enter the interface

Output parameters

► Output voltage:

Output frequency:

Press the "Up" and "Down" keys to select the content that needs to be set, press the "Enter" key to confirm, the ►

cursor on the left will become flashing, and then press the "Up" and "Down" keys to select the modified data.

Output voltage

208Vac/220Vac/230Vac/240Vac selection, output frequency 50.0Hz/60.0Hz selection, if the mains frequency is between 46Hz and 54Hz, the output frequency will be set to 50.0Hz; if it is between 56Hz and 64Hz, Then set it to 60.0Hz , and then select the data you want, and then press the "Enter" key, the cursor does not blink, indicating that the setting is successful

Select the battery type setting and press the "Enter" key to enter the interface

Battery Type

► Type selection:

Section number selection:

Press the "Up" and "Down" keys to select the content that needs to be set, press the "Enter" key to confirm, the ►

cursor on the left will become flashing, and then press the "Up" and "Down" keys to select the modified data.

Select the type of lithium iron phosphate/ternary lithium battery, select the default selection for the number of cells, and then select the data you want, and then press the "Enter" key, the cursor does not blink, indicating that the setting is successful

Select the time-sharing time setting and press the "Enter" key to enter the interface

<div data-bbox="280 226 732 521" style="border: 1px solid black; background-color: #e1f5fe; padding: 10px;"> <p>▶ Time-sharing 1: 10min</p> <p>Time share 2:</p> <p>Time-sharing 3:</p> </div>	<p>Press the "Up" and "Down" keys to select the content that needs to be set, press the "Enter" key to confirm, the ▶ cursor on the left will become flashing, and then press the "Up" and "Down" keys to select the modified data. Choose according to the backup time required on site, and then select the data you want, and then press the "Enter" key, the cursor does not blink, indicating that the setting is successful</p>
--	--

4. Troubleshooting

How to find the fault when the distributed power system (DPS) is abnormal, it is recommended to troubleshoot according to the following steps :

- 1) Check the distributed power system (DPS) status fault status through LED display, LCD display and buzzer alarm sound, or listen to the user 's description ;
- 2) Statically check the faulty board ;
- 3) Replace the faulty parts ; .
- 4) Static inspection ;
- 5) Power-on inspection ;
- 6) Test after repair.

4.1 LCD display alarm icon troubleshooting

Any alarm display means abnormal occurrence of distributed power system (DPS), indicating that some conditions may endanger the reliability of distributed power system (DPS), but these conditions will not immediately cause power supply interruption.

Alert Shortcode	Alarm event	Alarm code	Alarm event
00	no warning	1 6	overheating
01	Mains abnormal	1 7	Rectifier over temperature
0 2	Abnormal bypass	18	Inverter over temperature
0 3	Battery low voltage shutdown	19	Battery over temperature (disabled)
0 4	Low battery warning	20	rectified cryogenic
05	open battery	twenty one	low temperature inverter
0 6	battery high voltage	twenty two	Low battery temperature (disabled)
0 7	Charging voltage is too high	twenty three	Inverter Fan Alarm
08	charging failure	twenty four	SPS fan alarm
09	emergency start open	25	Rectifier Fan Alarm
10	Inverter overload	26	Abnormal battery power
11	Overload to bypass	27	Abnormal mains power supply
12	bypass overload	28	bypass current feedback
13	Module switch open	29	Three-phase unbalanced (disabled)
14	maintenance bypass open	30	neutral loss
15	Reserved bits are not enabled	31	Setup failed

4.2 LCD display fault code troubleshooting

When the Distributed Power System (DPS) fails it will transition to the fault mode

error code	failure event	Fault description	action	deal with
547	Bus soft start failed	When the BUS voltage cannot reach the set value within 30 seconds, the fault code will be displayed	Check whether the power supply components such as IGBT and PFC thyristor and grid thyristor are good, and at the same time, check whether the components of the drive circuit are good.	
521	Bus voltage is too high	When any of the following conditions occurs, a fault code will be displayed. 1. +Bus voltage is higher than 450V or –BUS voltage is lower than -450V for more than 50 milliseconds 2. +Bus voltage is higher than 400V or –BUS voltage is lower than -400V for more than 1.5 seconds	The power board may be damaged; It mainly detects whether the power components such as IGBT and SCR in the PFC part of the power board and the mains rectification part are damaged, and also detects whether the components on the drive line are damaged.	

522	Bus voltage is too low	When the +BUS voltage is lower than 230V or -BUS voltage is higher than -230V for more than 200 milliseconds, the fault code is displayed	The power board may be damaged; It mainly detects whether the power components such as IGBT and SCR in the PFC part of the power board and the mains rectification part are damaged, and also detects whether the components on the drive line are damaged .	
504	Inverter soft timeout	The inverter voltage does not reach the set value within 30 seconds	Check the inverter drive circuit	
511	R phase inverter voltage is too high	When the inverter voltage is higher than 276V for more than 128 milliseconds, the fault code is displayed	Check whether the inverter drive circuit is normal, check whether the IGBT protection circuit and PFC components are normal.	
514	R phase inverter voltage is too low	When the inverter voltage is lower than 140V for more than 128 milliseconds, the fault code is displayed.	Check whether the inverter drive circuit is normal, check whether the IGBT protection circuit and PFC components are normal. Usually, check whether the IGBT protection circuit and PFC components are normal.	

508	Inverter short circuit	When the inverter output voltage is lower than 50V and the output current is lower than 20A for more than 5 cycles, the fault code is displayed	Remove all loads and shut down the distributed power system (DPS). Check distributed power system (DPS) output and load for short circuit. Before powering on again, confirm that the short circuit has been isolated and that there is no internal fault in the distributed power system (DPS).	
541	R phase inverter relay failure	After the BUS soft start, the inverter PWM has not been turned on	Check if the inverter relay RY5 on the power board is intact.	
523/524	overheating _	Heat sink temperature is too high	Check whether the distributed power system (DPS) is overloaded, whether the ventilation pipe is blocked, and whether the ambient temperature is higher than 40 °C . After the fault and blockage are resolved, please keep the distributed power system (DPS) cool down for 10 minutes before powering on. Operation of Distributed Power Systems (DPS) at 40 °C ambient temperature is not recommended.	

517	Inverter overload	Overload to bypass, but no bypass output	Check whether the bypass is normal, and check the load, and some non-critical loads can be properly removed.	
-----	-------------------	--	--	--

4.3 Troubleshooting other problems

Problem	Possible Causes	Action
Short battery backup time	The battery is not fully charged	Keep the distributed power system (DPS) connected to the grid for more than 10 hours to charge the battery
	Distributed Power System (DPS) Overload	Check load and remove non-critical load
	battery aging	Replacement battery
	Charging pad failed	Replace the charging board
Distributed Power System (DPS) fails to power up	button not pressed long enough	Press the button for more than 0.5 seconds
	The battery is not connected or the battery voltage is low or the charging board is faulty	Check charging pad and battery
	Distributed Power System (DPS) Faults	Replacing the Power Module of the Distributed Power System (DPS) Host
Battery disconnected (upper computer)	The communication between the communication board and the BMS is interrupted	Insert and remove the battery to initialize the communication board
Distributed power system (DPS) lost connection (host computer)	RS485 ID restored to " factory settings "	Reset RS485 ID

5. Module replacement

5.1 Battery Module Replacement Procedure

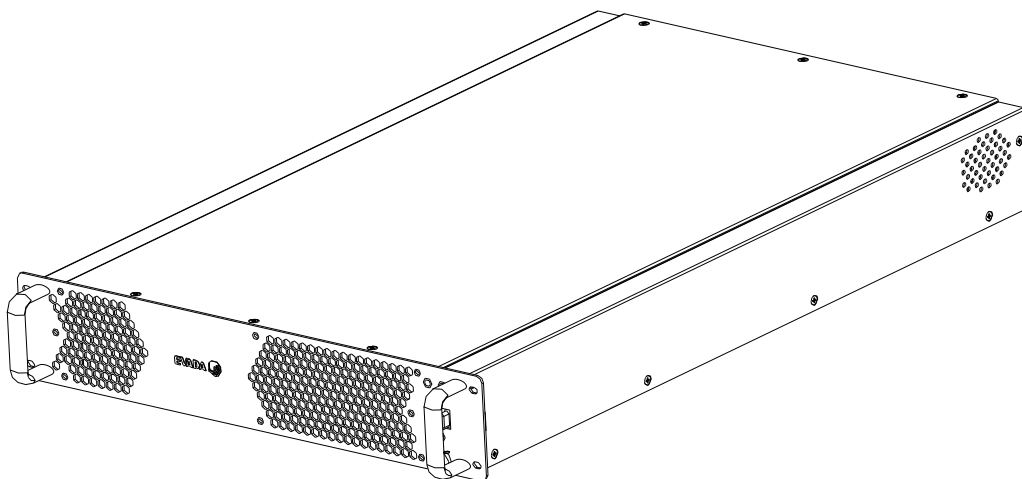
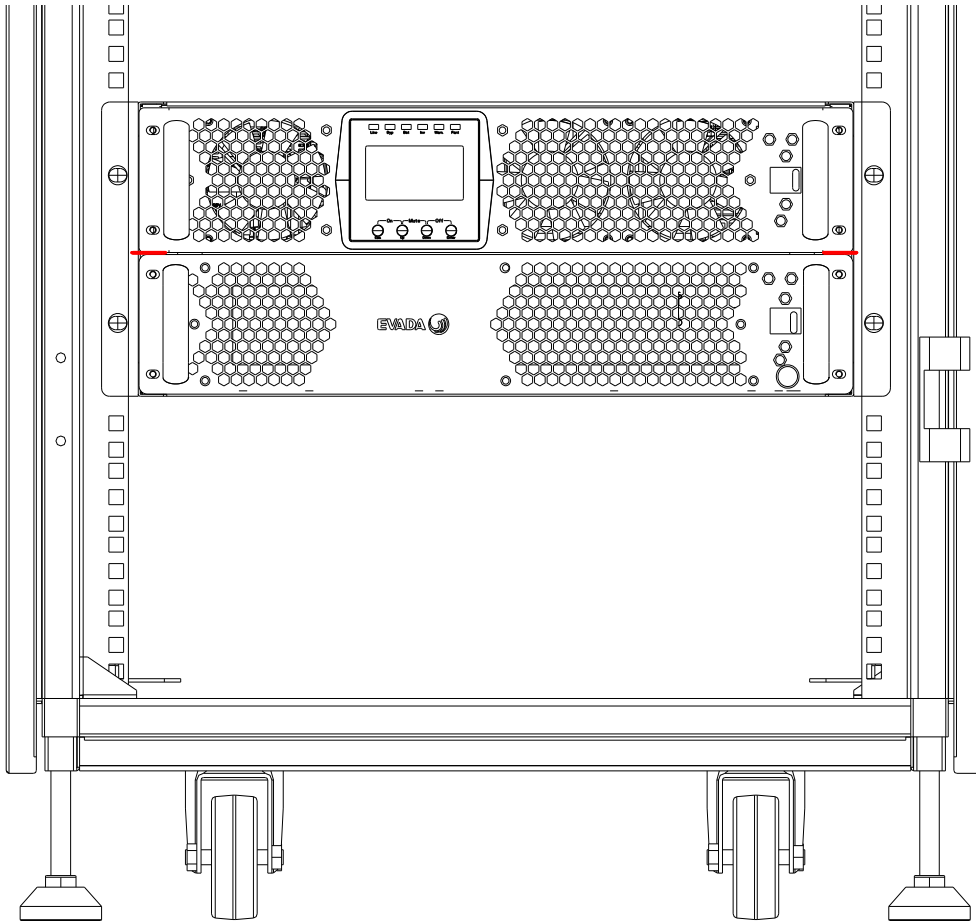
Notes on battery handling:

- 1) Before handling, take off metal objects such as rings and watches.
 - 2) Customers cannot replace the internal cables of the battery by themselves
 - 3) The battery or battery pack cannot be disposed of with fire, otherwise it will explode and hurt people
 - 4) Do not damage or open the battery. The electrolyte overflowed from the battery is highly toxic and harmful to the human body.
 - 5) Avoid short-circuiting the positive and negative poles of the battery, otherwise it may cause fire or electric shock.
 - 6) Check for voltage before touching the battery. The battery circuit is not isolated from the input voltage circuit, and there is a danger of high voltage between the battery terminal and the ground.
-

The distributed power supply is used in the computer room. When the battery fails and needs to be replaced, follow the steps below:

Step 1: Use the supporting software to detect the battery, read the battery data through the COM USB port, record the battery data and confirm the working status of this product; if it is in battery mode (battery discharge): first confirm whether the working mode can be changed to Use other modes to avoid power failure of the load device due to unplugging the battery.

Step 2: After confirming the working mode, open the four bolts fixed on the main chassis (open the bolts fixing the battery on the cabinet), grab the handle with both hands and pull out a short distance first (**our battery supports hot swapping**) , because the battery If it is heavy, it is recommended to be lifted by two people after pulling out a short distance.



Step 3 : After pulling out , lift the battery to a safe place to avoid secondary damage to the battery due to high temperature and humidity.

Step 4 : After the above work is done, (replace new batteries - two people are recommended) the same two people lift one and put it into the main box distributed power supply (DPS) to automatically detect the battery .

Step 5 : Contact our company in time to deal with the faulty battery.

5.2 Main chassis removal steps

During the operation of the distributed power supply , when there is a problem with the power module of the main engine, the power module of the main engine needs to be replaced , and the following steps should be followed when replacing the main engine

Precautions:

1. Before handling, take off metal objects such as rings and watches to prevent dangers such as fire and electric shock;
2. Customers cannot replace the internal cables of the main box by themselves;
3. When removing the power module of the main engine, pay attention to the placement of metal objects such as screws to avoid falling into the main chassis
4. The distributed power system (DPS) can only operate and maintain the bypass switch when it is operating in the bypass state (the Byp indicator light of the front display bypass mode is on), so as to prevent parallel connection between the inverter and the bypass .

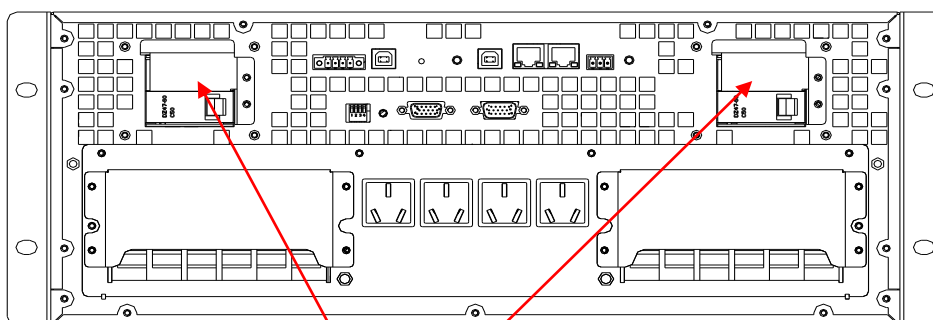
5.2.1 There is a problem with the main chassis

Follow the steps below to confirm the main engine power module failure :

The maintenance work is performed in two parts to disassemble the main chassis and install the main chassis.

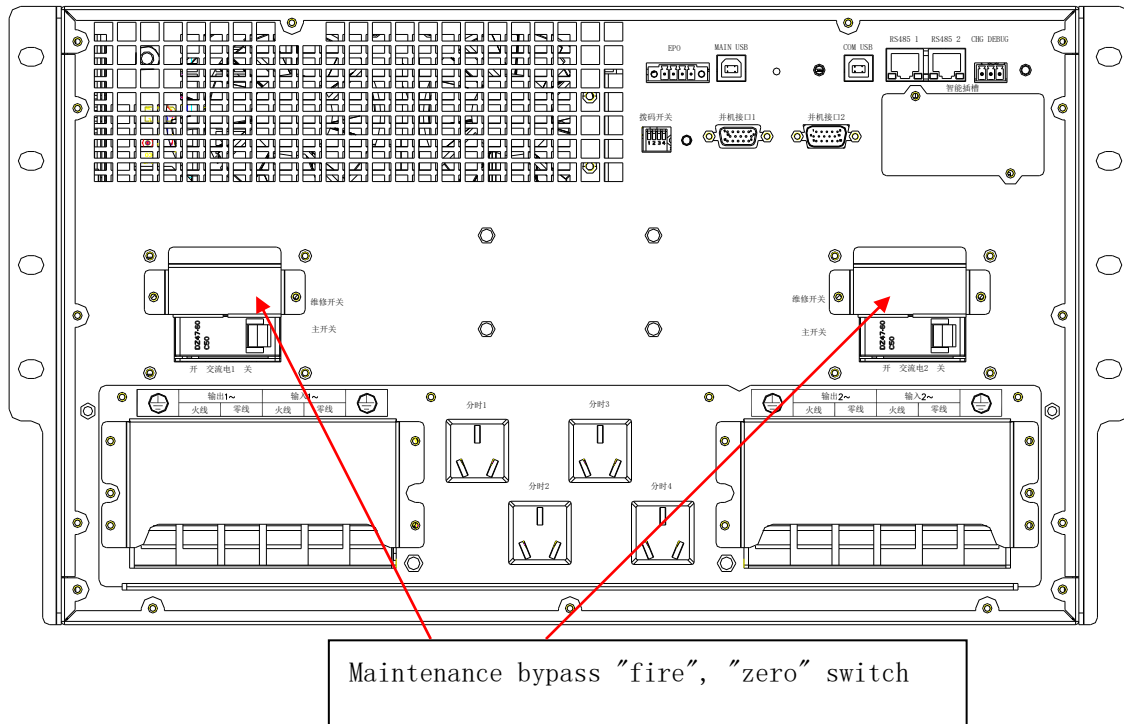
Disassembly of the main chassis:

Step 1: Remove the protective cover of the maintenance switch corresponding to 'AC 1' and 'AC 2' on the back of the main cabinet , the distributed power system automatically detects and switches to bypass mode, and sends a maintenance switch open alarm message, and closes the maintenance bypass switch ;



Maintenance bypass "fire", "zero" switch

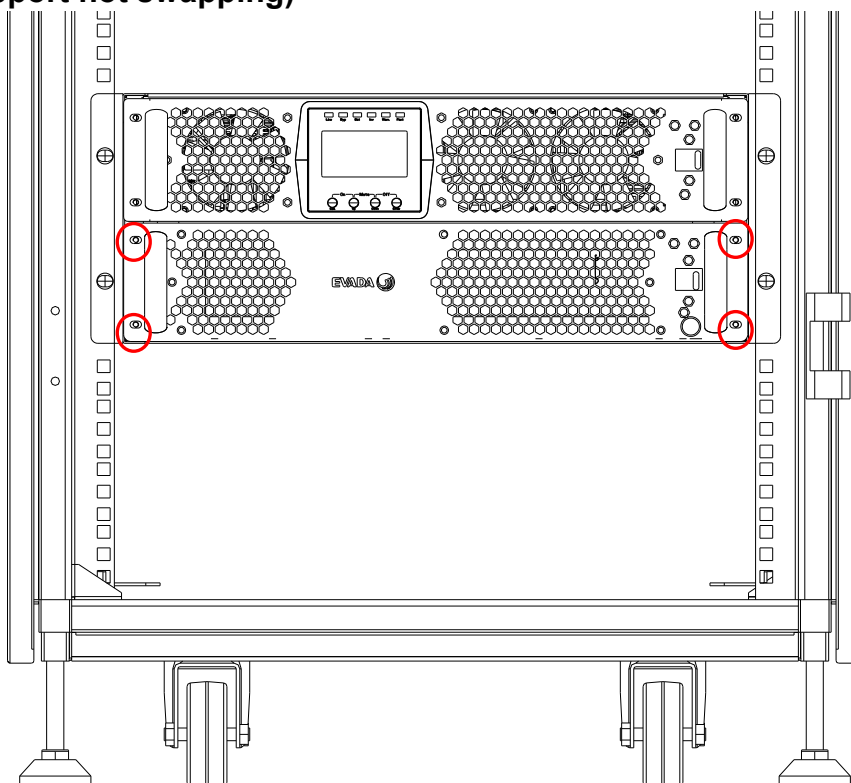
DPS-1106A Service Switch Location

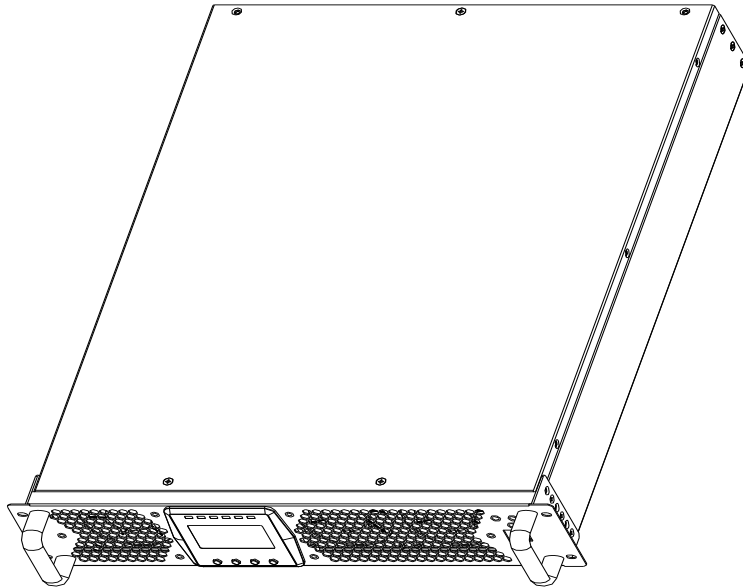


DPS-1110A Service Switch Location

Step 2: Disconnect the main input switch (main input 1);

Step 3: Open the latch on the front of the main engine power module, and after confirming the working mode (in the maintenance bypass state), unfasten the four bolts fixed on the main chassis (open the bolts on the main cabinet to fix the main engine power module), and grasp it with both hands Pull out **the handle first (our power modules support hot swapping)**






Step 4: After the above operations, remove the power module of the main engine , mark the fault and fill in the product maintenance form.

5.2.2 Host power module installation:

Step 1: Insert the main engine power module into the main cabinet and lock the front overhead, and fix the main engine power module to the main cabinet with four bolts ;

Step 2: Close the main input switch (main input 1), and the distributed power supply (DPS) system will switch to bypass mode;

Step 3: Disconnect the "fire" and "zero" switches of the maintenance bypass, cover the switch cover, and cancel the alarm of the distributed power supply (DPS) system;

Step 4: Press and hold  Press the key for more than 3 seconds, after the buzzer beeps, the distributed power system (DPS) will enter the mains mode

6. Inspection and maintenance

6.1 Inspection

Regular inspection is recommended, please arrange the inspection cycle according to your needs (preferably no more than 2 years)

6.1.1 Distributed power host inspection

1. View the operation records and analyze the running power supply and alarms of the host or ask the management personnel of the computer room to take corresponding measures to improve the quality of power supply and reduce the number of alarms of the host;
2. When the on-site engineers and the management personnel of the computer room conduct routine inspections, if any abnormalities are found, please use;
3. Check whether there is any peculiar smell in the cabinet where the distributed power system (DPS) is placed;
4. Check whether the front and rear air intake and exhaust air of the host are normal, and whether the exhaust air temperature is too high (the human body feels obviously hot);
5. Check whether the load displayed on the panel is normal, whether there is bypass power supply or undervoltage;
6. The electric meter detects whether the grounding is correct, whether the grounding of the distributed power system (DPS) and the machine room are connected properly (grounding resistance is less than 0.5Ω);
7. Check whether the connecting wires of the distributed power system (DPS) are loose, and whether the connecting terminals are seriously oxidized. If it occurs, please find the cause and correct it in time;
8. the host power module and battery module are plugged in place and whether the lock is loose;
9. Detect whether the distributed power system (DPS) is placed in place, whether there is any abnormal placement such as tilting, upside down, etc., if any, please correct it

in time;

10. According to the inspection record table, various indicators are detected and the data are recorded.

6. 1.2 Battery module inspection

Read the battery status through the battery monitoring host computer software, and record the highest cell voltage, the lowest cell voltage, the highest temperature and other related data.

If you find a battery fault, please contact us in time to confirm the fault and repair matters

6.1.3 Inspection records and inspection reports

Fill in relevant inspection records

6.2 Maintenance

6. 2.1 Battery storage

Before storing this product, please charge it for 7 hours. When storing, it should be placed upright and flat in a dry place. During storage, please perform charging maintenance according to the table below:

storage temperature	charging interval	charging time
-5°C - 45°C	every 3 months	1 to 2 hours

6. 2.2 Battery maintenance

- Distributed power supply has dangerous voltage when it is running, and it can only be maintained by qualified electrical engineers trained by our company .
- Even when the main power input has been disconnected, components within a distributed power source are still at risk from being connected to the battery.
- When performing equipment maintenance, first pull out the battery module and

disconnect the main power input.

- Only maintenance personnel trained by our company and equipped with protective measures can engage in or supervise battery replacement operations.
- The battery circuit is not isolated from the mains input. Hazardous voltages may be present between the battery terminals and ground. Before touching, please confirm that there is no voltage!
- Batteries may cause electric shock, short circuit and high current. Before servicing, remove metal objects such as watches, rings, and use tools with insulated grips and handles during servicing.
- When replacing the battery, please use the standard battery provided by our company .
- Waste batteries should be disposed of in accordance with local regulations.
- Only use the fuse with the same type/current value as the original distributed power supply to avoid dangerous events such as fire.
- Non-professionals should not disassemble the distributed power supply .
- If you need to replace the supporting cables (input and output cables, etc.) of the distributed power supply, please contact our company in time to avoid failures caused by cable problems.