

QUICK GUIDE

Residential ESS Battery Cabinet

Mint-JKE5 | Mint-JKE10 | Mint-JKE15 | Mint-JKE20

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iPotisEdge



Limitation of liability

The equipment manufacturer will not bear any direct or indirect responsibility for the damage to the battery system or property loss caused by the following circumstances.

- a** The battery system has been modified, altered, or replaced without authorization from the equipment manufacturer.
- b** The battery system serial number is changed and erased by a technician other than the equipment vendor.
- c** The design and installation of the system combined with other equipment does not comply with standards, safety regulations and other relevant requirements.
- d** Equipment damage due to failure to comply with the requirements of the battery system user manual.
- e** Equipment damage caused by improper use or misuse of the battery system.
- f** Equipment damage due to inadequate ventilation of the battery system.
- g** Maintenance procedures for the battery system did not follow acceptable standards.
- h** Equipment damage caused by force majeure, such as earthquake, storm, lightning, overvoltage, fire, etc.
- i** Equipment damage caused by any external factor.

Personal safety

- a** Wear appropriate personal protective equipment during equipment operation. In case of any fault that may cause personal injury or equipment damage, stop the operation immediately, report to the person in charge, and take effective protective measures.
- b** Before using the tools, please master the correct use of the tools to avoid injury and damage to the equipment.

- c** To ensure personal safety and normal use, reliable grounding shall be carried out before use.
- d** In the event of a battery failure, the temperature may exceed the burn threshold for touch screen and contact should be avoided.
- e** Do not place extraneous items on the top of the device or insert them anywhere in the device.
- f** Do not place the battery module in water or other liquids.
- g** Do not short circuit the battery terminals. Short circuit of the battery will cause combustion.
- h** The battery may cause the danger of electric shock and large short-circuit current. When using batteries, the following precautions should be taken:
 - Remove the watch, ring, or other metal object. Use tools with insulated handles.
 - Wear rubber gloves and boots.
 - Do not place tools or metal parts on top of the battery.
 - Disconnect the charging power source before connecting or disconnecting the battery terminals.
 - Check if the battery is accidentally grounded. If the ground is accidentally connected, remove the power supply from the ground.
 - Contact with any part of a grounded battery may result in electric shock. If these grounds are removed during installation and maintenance, the likelihood of such an electrical shock can be reduced.
- i** Do not use water or detergent to clean the electrical parts inside and outside the cabinet.
- j** Do not stand or lean or sit on the equipment.
- k** Do not damage the modules of the equipment.
- l** When installing the battery module, if the battery module is dropped or

strongly impacted, the equipment will be damaged. Do not continue to use it, otherwise there will be safety risks (battery leakage, electric shock injury, etc.).

Grounding requirements

- a** When installing the equipment to be grounded, the protective ground wire must be installed first; when removing the equipment, the protective ground wire must be removed last.
- b** Do not damage the grounding conductor.
- c** It is forbidden to operate the equipment without grounding conductor.
- d** The equipment shall be permanently connected to the protective ground. Before operating the equipment, check the electrical connection of the equipment to ensure that the equipment is reliably grounded.



Safety instructions

DANGERS

- a** The battery system is a high-voltage system. Before operating the equipment in the system, please turn off the power supply to avoid danger, and strictly follow all the safety precautions in this manual and the safety signs on the equipment.
- b** Only professionals are allowed to work on the battery system. Professionals should be familiar with local regulations, standards and electrical systems, have received professional training, and be familiar with the relevant knowledge of this product.

- c** Do not use if the battery or control box is obviously defective, damaged, or missing.
- d** Do not disassemble or modify any part of the battery or control box without official authorization from the equipment manufacturer.
- e** Battery damage may result in electrolyte leakage. In case of electrolyte leakage, do not contact the leaked electrolyte and volatile gas, and contact the after-sales service center immediately for assistance.

ALERT

- a** In the event of inadvertent contact with a leaking substance, proceed as follows:
 - Inhalation of spilled material: Evacuate from the contaminated area and seek immediate medical attention.
 - Eye contact: Rinse with clean water for at least 15 minutes and seek immediate medical attention.
 - Skin contact: Wash contact area thoroughly with soap and water and seek medical attention immediately.
 - Ingestion: induce vomiting and seek immediate medical attention.
- b** Do not move the battery system when connecting the external battery expansion module. If the battery needs to be replaced or added, please contact the after-sales service center.

BE CAREFUL

- a Transportation**
 - Ensure that the battery system is not damaged during transportation and storage.

- Consider the weight of the battery or control box when lifting it.

- Gloves are required when handling batteries.

- Do not hit, pull, drag, or step on the device, or place extraneous objects on any part of the battery module.

- Transport must be carried out by trained professionals and operations in the process must be documented.

b Make sure that the equipment is placed firmly and not tilted. Overturning of the equipment may cause damage to the equipment and personal injury.

c Make sure there is a carbon dioxide, Novac 1230, or FM-200 fire extinguisher near the equipment.

d Use fire extinguishers of recommended materials. Do not use water or ABC powder extinguishers to extinguish a fire; firefighters must wear protective suit and self-contained breathing apparatus.

e When the ambient temperature exceeds 150 °C, the battery has

the risk of explosion.

f Use proper tools and protection when installing and maintaining heavy equipment. Personal injury may result from improper handling.

g For high voltage operation, use special insulating tools.

h Use of the cable in a high temperature environment may cause aging and damage to the insulation. The distance between the cable and the periphery of the heating device or heat source area shall be at least 30 mm.

i Cables of the same type shall be bound together, and cables of different types shall be laid at least 30 mm apart. It is forbidden to wind or cross each other.

3 Symbol description

Symbol	Description	Symbol	Description
	There is a potential hazard after the equipment is operated. When operating the equipment, take precautions while operating the equipment		Equipment should be kept away from open flames or sources of ignition
	High voltage hazard. There is high voltage during the operation of the inverter. Please be sure when operating the inverter. Ensure that the inverter is powered off.		Keep equipment away from areas accessible to children.
	Please use the equipment properly. In extreme cases, the equipment has the risk of explosion.		Do not use water to extinguish the fire.
	The equipment contains corrosive electrolyte. Avoid contact with leaking electrolyte or volatile gases.		The equipment should not be disposed of as domestic waste. Please dispose of the equipment according to local laws and regulations, or send it back to the equipment manufacturer.
	Please read the product manual carefully before operating the equipment.		Equipment should be placed in the right place and recycled in accordance with local environmental regulations.
	Pay attention to personal protection during installation, operation and maintenance.		Protective earth mark to indicate the connection position of the protective earth wire.

4 Storage environment

If the device is not being installed for immediate use, verify that the storage environment meets the following conditions:

- The equipment shall be packed in boxes and sealed with desiccant.
- If the equipment is not installed within 3 days after unpacking, it is recommended to store the equipment in the packing box.
- Storage SOC: 25% ~ 50% SOC, charge and discharge cycle is required every 3 months of storage.
- Storage temperature range: no more than 1 month at -20 °C ~ 45 °C; no more than 1 year at 0 ~ 35 °C.
- Humidity range: 0 ~ 95%, no condensation. Do not install when the battery interface is wet and condensed.
- Store equipment in a cool place, away from direct sunlight.
- Store equipment away from flammable, explosive, corrosive, etc.

5 Packing list

The details of accessories contained in the packing box are shown in the table below:

Product	NO.	Name	Specification	Unit	Amount	Remarks
PDU	1	PDU		PCS	1	
	2	Base		PCS	1	
	3	Base pads		PCS	2	
	4	PDU side protective cover		PCS	1	
	5	PDU side protective cover (with holes)		PCS	1	
	6	Pack connection piece on the bottom		PCS	2	
	7	Hexagon socket combination bolts	M4*12	PCS	8	
	8	Wall fixing connection piece		PCS	2	
	9	Hexagon socket combination bolts	M6*12	PCS	2	
	10	Stainless steel expansion screws	M6*45	PCS	2	
	11	Cylindrical socket head cap screws	M5*8	PCS	4	To fix side protective cover
	12	RJ45 terminal block		PCS	1	Connected with the wire
	13	Inverter communication cable	1.5m	PCS	1	

PDU	14	Power main positive outlet	HV+ to Inverter+ 1.5m	PCS	1	1.5m
	15	Power main negative outlet	HV- to Inverter- 1.5m	PCS	1	1.5m
	16	DC bus bar -	B- to B-	PCS	1	Length varies according to different system models
	17	DC bus bar +	B+ to B+	PCS	1	
	18	Inter-Pack DC Cable	B+ to B-	PCS	1	Cable amount varies to different models. 5kWh-non; 10kWh-one; 15kWh-two; 20kWh-three.
	19	Termination resistors		PCS	1	
	20	Communication wire	COM port to COM port.	PCS	2	Cable amount varies to different models.
	21	Grounding cable 1	1500mm	PCS	1	
	22	Grounding cable 2	345mm	SET	1	5kWh-non; 10kWh-3PCS; 15kWh-4PCS; 20kWh-5PCS;
	23	Grounding cable 3	55mm	PCS	1	1m
	24	Ties		PCS	4	
	25	Quick guide		PCS	1	
	26	Warranty letter		PCS	1	
	27	Installation tools		SET	1	
	28	Hexagon socket combination bolts	M4*12	PCS	2	
	29	Hexagon socket combination bolts	M6*12	PCS	2	
	30	Stainless steel expansion screws	M6*45	PCS	2	
	31	Cylindrical socket head cap screws	M5*8	PCS	2	
	32	WiFi Module		PCS	1	WiFi module connected with line
	33	Packing List		PCS	1	

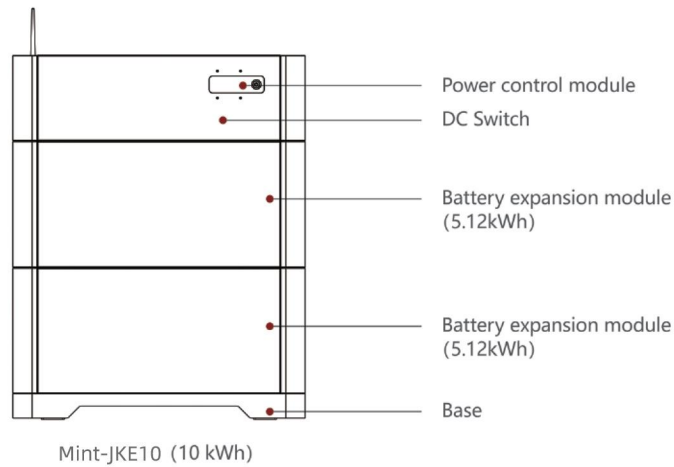
The details of accessories contained in the packing box are shown in the table below:

Product	NO.	Name	Specification	Unit	Amount
Pack	1	Battery module	5.12kWh	PCS	1
	2	Protective side cover		PCS	2
	3	Battery box connection piece		PCS	2
	4	Hexagon socket combination bolts	M4*12	PCS	8
	5	Wall fixing connection piece		PCS	2
	6	Hexagon socket combination bolts	M6*12	PCS	2
	7	Stainless steel expansion screws	M6*45	PCS	2
	8	Cylindrical socket head cap screws	M5*8	PCS	4
	10	Ties		PCS	4
	11	Hexagon socket combination bolts	M4*12	PCS	2
	12	Hexagon socket combination bolts	M6*12	PCS	2
	13	Stainless steel expansion screws	M6*45	PCS	2
	14	Hexagon socket head cap screws	M5*8	PCS	2
	15	Drying agent		PCS	1
	17	Quick guide		PCS	1
	18	Warranty card		PCS	1
	19	Certificate of conformity		PCS	1
	20	Package List		PCS	1

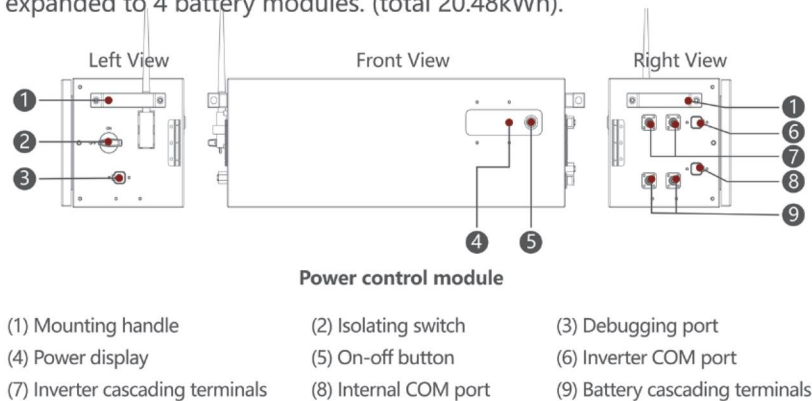
6 Product introduction

6.1 ESS Battery Cabinet Product Appearance

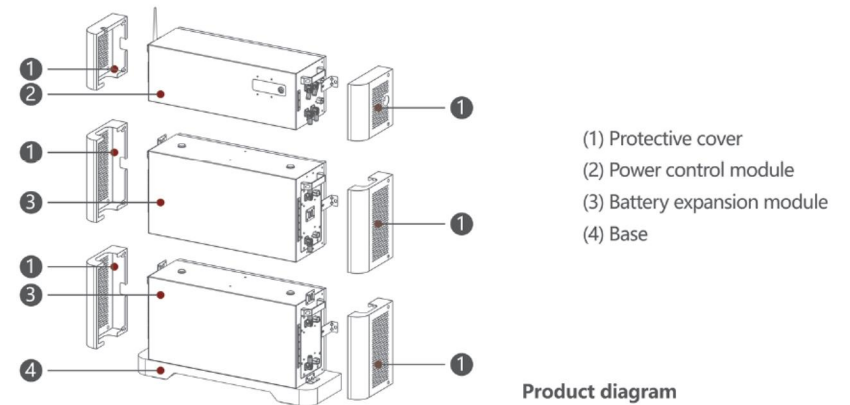
ESS Battery Cabinet is applicable to the grid-tied or off-grid systems. It can store and release electric energy based on service requirements.



ESS Battery Cabinet consists of a power control module and battery expansion modules. Each battery module is 5.12kWh, and can be expanded to 4 battery modules. (total 20.48kWh).



- (1) Mounting handle (2) Internal COM port 1 (3) Battery cascading terminal(+)
- (4) Battery cascading terminal(-) (5) Internal COM port 2

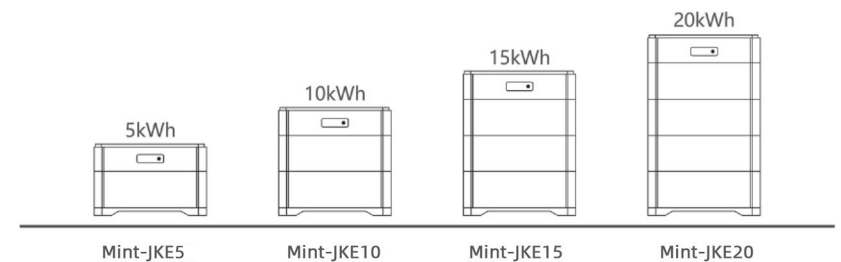


Note: The specifications are subject to change without prior notice.

6.2 ESS Battery Cabinet Model

We provide different models to meet user's needs :

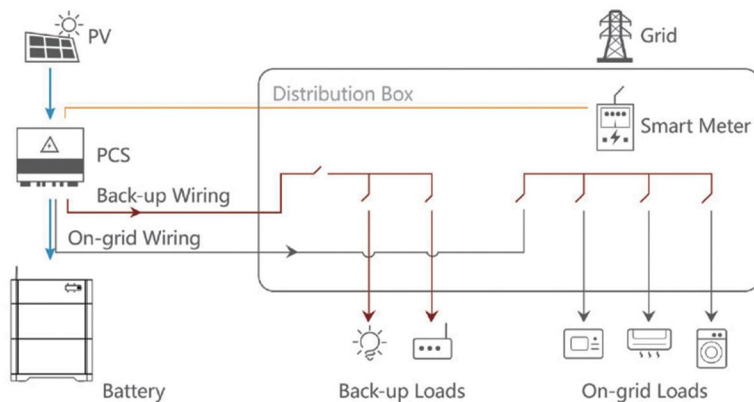
Mint-JKE5, Mint-JKE10, Mint-JKE15, Mint-JKE20



6.3 Technical data

Model	Mint-JKE5	Mint-JKE10	Mint-JKE15	Mint-JKE20
Battery Type	LiFePO4			
Battery Module Quantity	1	2	3	4
Nominal Voltage	102.4V	204.8V	307.2V	409.6V
Nominal Capacity	50Ah			
Nominal Total Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Electrical Parameters				
Max Charging Voltage(System)	116.8V	233.6V	350.4V	467.2V
Discharge Cut-Off Voltage(System)	83.2V	166.4V	249.6V	332.8V
Max Charging Voltage(Cell)	3.65V			
Discharge Cut-Off Voltage(Cell)	2.6V			
The Trip Voltage Of Overcharge Protection Voltage Contro	116.8V	233.6V	350.4V	467.2V
The Trip Voltage Of Over-Discharge Protection Voltage Control	83.2V	166.4V	249.6V	332.8V
Standard Charging/ Discharge Current	25A@constant			
Max.Charging/ Discharge Current	50A@constant			
Mechanical Parameters				
Net Weight	73.0±2.0kg	126.0±2.0kg	180.0±2.0kg	233.0±2.0kg
Dimension(W*D*H)	758*228*617mm±2mm	758*228*945mm±2mm	758*228*1273mm±2mm	758*228*1601mm±2mm
Ingress Protection	IP65			
Cooling	Natural Cooling			
Operation Condition				
Environment Temperature	Charge:0°C~55°C/Discharge:-20°C~60°C/Storage:-10°C~45°C			
Operation Humidity	5~95%, RH			
Altitude	< 2000m			
Mounting Type	Floor-mounted			
Working Environment	Indoors, Outdoors			

6.4 System Schematic

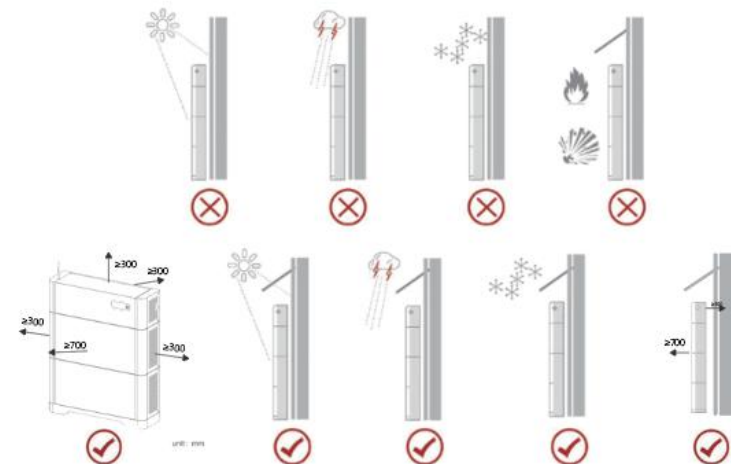


7 Installation and fixing

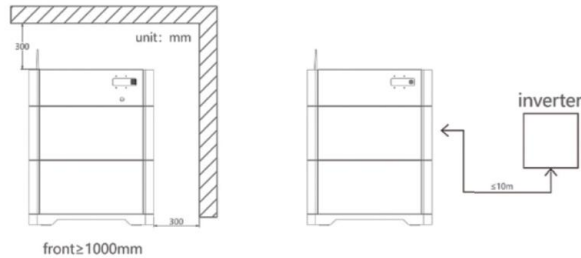
7.1 Installation Environment

Warning

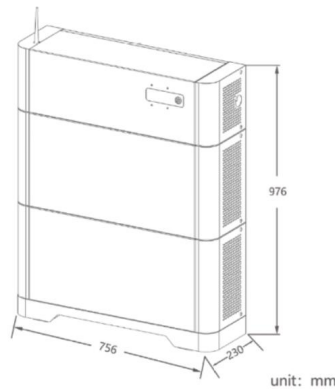
- Install the device on a solid brick-concrete structure or concrete wall or ground. If other types of wall and ground are selected, the wall and ground must be made of flame retardant materials and adequately strong to bear the product.
- When drilling, avoid the embedded pipes or lines to prevent short circuit or other dangers.
- Do not place anything over the equipment or cover it.
- Do not place in conditions fraught with corrosive gases or liquids.
- Do not install in areas accessible to children.
- Do not place flammable, explosive, and corrosive items around the equipment.
- Avoid low spots that are susceptible to water damage.
- Avoid environments with strong interference.
- Avoid heat or cold sources.
- Avoid places exposed to sunlight, rain or damp.
- The product should be kept at least 1 meters away from the heat source (e.g. hot water systems, gas heaters or the like).
- When installing the equipment, ensure that there is no other equipment (except related equipment and sunshade) or inflammable and explosive articles around. Reserve adequate space for heat dissipation, safety isolation, and safe operation.



7.2 Installation Space



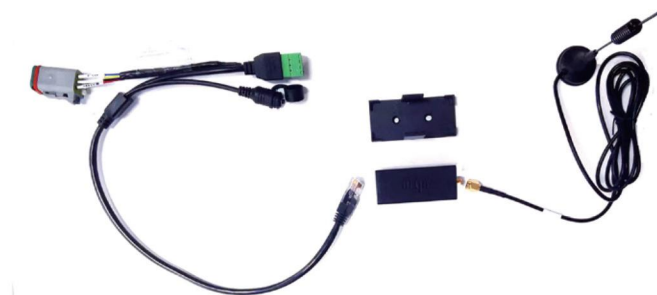
7.3 Mounting Hole Dimensions



7.4 WIFI Module

7.4.1. Hardware installation/connection

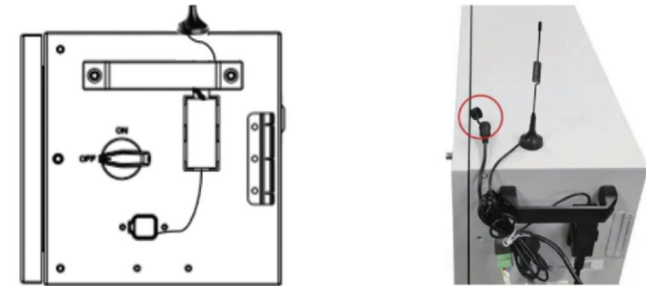
- Screw the fixing bracket to the left side of the power control module.
- Connect the four components from left to right.
- Connect the male COM connector with the female COM port on the power control module.



7.4.2 Reset WIFI module

Under the power supply condition, long press 4 seconds until the green light of the module flashes slowly (0.3s on, 0.3s off). After the module is restored to the initial settings, search in the mobile phone's WIFI network list for

EW11_#### WiFi (login name: admin, password: admin), you can redistribute the network.



7.5 Installation environment

- The battery system shall be installed on the ground with sufficient bearing capacity and flatness; if the ground does not have sufficient bearing capacity and flatness, it shall be ensured by other means (such as making foundation, adding bearing plate, etc.).
- The battery system works best in the temperature environment of 20 ~ 40 °C.
- Avoid direct exposure to heat and rain.
- Avoid installation near high temperature heat source or low temperature cold source.
- Avoid installation in areas with extreme variations in ambient temperature.
- Avoid installation in an environment with strong interference.
- Avoid installation in areas accessible to children.
- Avoid installation in areas prone to water accumulation.
- Do not place flammable, explosive, corrosive and other items around the equipment.

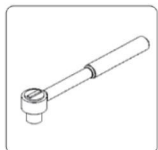
7.6 Inspection before installation

· Check the outer package. Before opening the energy storage outer package, check the outer package for visible damage, such as holes, cracks, or other signs of possible internal damage, and check the energy storage model. If there is any abnormal packaging or the energy storage model does not match, do not open it and contact your dealer as soon as possible.

· Inspect the deliverables. After unpacking the energy storage package, check the deliverables for completeness and any visible external damage. If any items are missing or if there is any damage, contact your dealer. Note: Please refer to the Packing List in the packing box for the quantity of delivered parts delivered with the packing. 8.6 Installation tools

7.7 Installation tools

The following tools are required to install the battery pack:



Torque wrench



Drill



Pencil or Marker

7.8 Safety gears for personal protection

It is recommended to wear the following safety gears when handling the battery pack.



Insulated gloves



Safety goggles

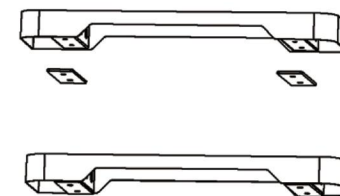


Safety shoes

7.8.1 Installation and fixation

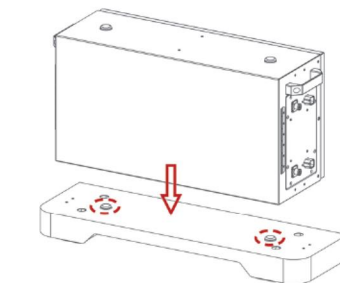
1.Base installation

Take out the base and two base anti-skid pads, tear off the protective paper of the anti-skid pads and stick them on the back of the base. It is optional to fix the base on the ground with screws.



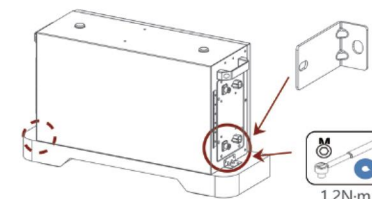
2.Place the base on the horizontal floor, then put the battery unit on the base.

(Note: pay attention to the red circle mark in the figure, the battery module(s) and base should be fully aligned to prevent dislocation).



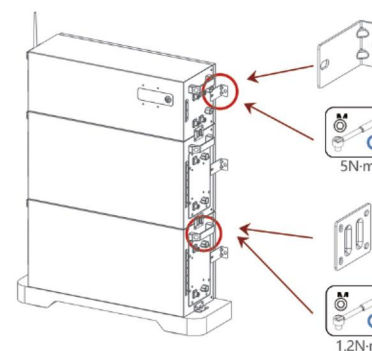
3.Using a fixing piece to fix the battery module and the base.

(Note: the torque shall not exceed 1.2N. M to prevent equipment damage.)



4.Place the remaining battery modules and power control module respectively.

(Note: the torque shall not exceed 1.2N-m to prevent equipment damage. The power control unit is placed on the battery unit. The legend is Mint-JKE10 product. There are two battery modules, each 5kwh, the battery module parameters are same, and the installation has no particular order.



5. Battery internal electrical connection



Note:

- A. The internal connecting cables are packed in the box;
- B. Before connecting cables, ensure that the switches of the devices are turned off. Otherwise, high voltage electric shock and equipment damage may be caused.

7.8.2 Battery internal electrical connection

1. Connection of Battery Cable

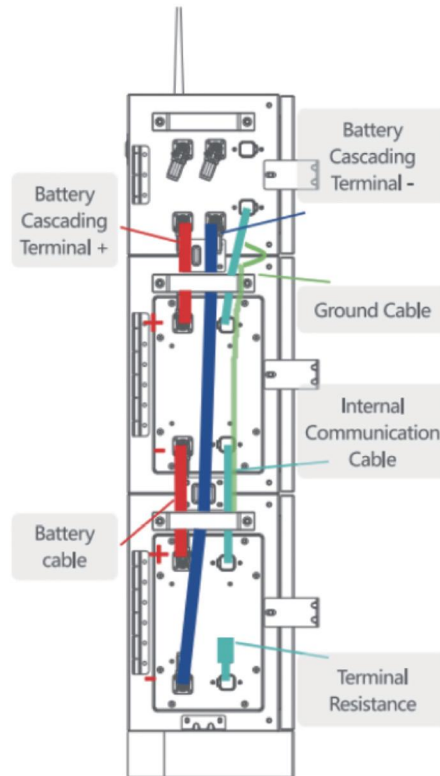
· The battery expansion modules in the ESS battery cabinet are connected in series.

· The top battery expansion module "+" is connected with the power control module "battery cascading terminal +", the top battery expansion module "-" is connected to the next battery expansion module "+", and so on.

· The bottom battery expansion module "-" is connected with the "battery cascading terminal" of the power control module-.

2. Connection of Communication Cables

· The ESS Battery Cabinet uses Daisy chain for internal communication.



· As shown in the figure, the battery expansion modules are connected one by one.

· The battery expansion module at the top is connected with the power control module internal communication interface.

· The bottom battery expansion module's internal COM port is connected to a terminal resistance.

3. Connection of Internal Ground Cable

Please connect each unit with internal ground cable which was shown in the right picture.

7.8.3 Battery external electrical connection



Note:

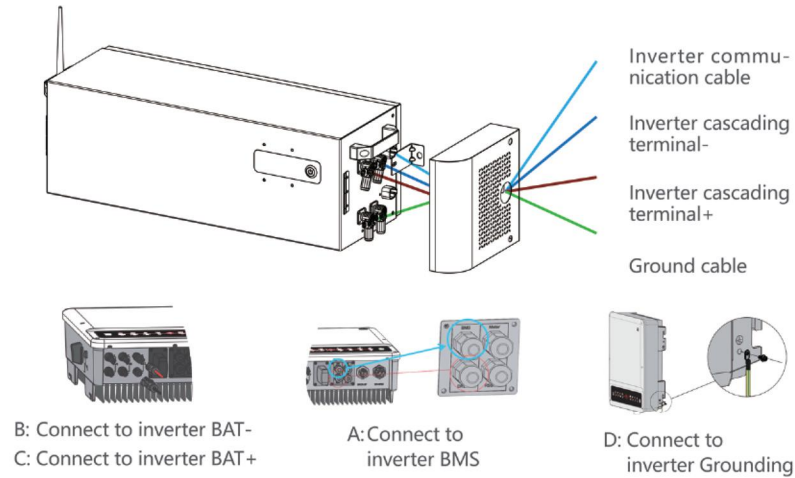
- A. The internal connecting cables are packed in the box;
- B. Before connecting cables, ensure that the switches of the devices are turned off. Otherwise, high voltage electric shock and equipment damage may be caused.

1. Cable specification

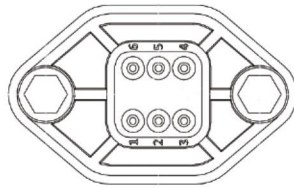
No.	Cable	Type	Conductor Cross Sectional Area Range
1	Ground cable	Single-core outdoor copper-core cable	4-6 mm ²
2	DC input power cable (inverter to battery and battery to battery)	Common outdoor PV cable in the industry	10 mm ²
3	Signal cable (inverter to battery and battery to battery)	Outdoor shielded twisted pair cable (8 cores)	0.20-0.35 mm ²

2. External Cable Connection

As shown in the following figure, external cables are routed through cable holes on the side panel and connected to the ports of PDU.



3. COM Port Pin Definitions

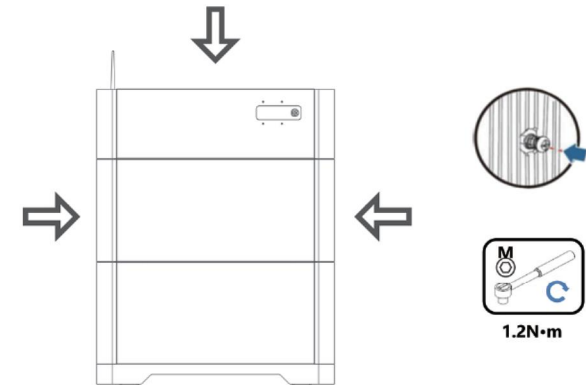


PIN	Definition	Note
1	External CANH	Communicate with inverter CAN
2	External CANL	
3	RS485-A	Communicate with inverter 485
4	RS485-B	
5	NC	
6	NC	

7.8.4 Verifying the Installation

1. Cover Installation

Please check the electrical cables, communication cables and ground cables to ensure they are correctly and tightly connected. Then, install the side protective covers with screws.



Based on the number of batteries, Tick on the corresponding model box after installing the equipment.

☐ Mint-JKE5
 ☒ Mint-JKE10
 ☐ Mint-JKE15
 ☐ Mint-JKE20

No.	Acceptance Criteria
1	The system is installed correctly and securely.
2	The cables are routed properly as required by the customer.
3	Cable ties are secured evenly without burrs.
4	The ground cable is connected correctly and securely.
5	The battery switch and all switches connected to the battery are OFF.
6	The DC input power cables and signal cables are connected correctly and securely.
7	Idle terminals and ports are locked by watertight caps.
8	The installation space is proper, and the installation environment is clean and tidy.

7.9 Power-on commissioning

Danger

- Please use special protective equipment and insulation tools to avoid electric shock or short circuit.
 - Observe while powering on. If any abnormality is found, power off the battery immediately,
 - pinpoint the cause, and power on after solving the problem.
- When the battery is disconnected for installation and commissioning or finishes discharging, please recharge the battery in time, otherwise it may be damaged due to overdischarge.
- Storing the batteries with low SOC may cause battery failure due to overdischarge. Please recharge the battery in time.

Warning

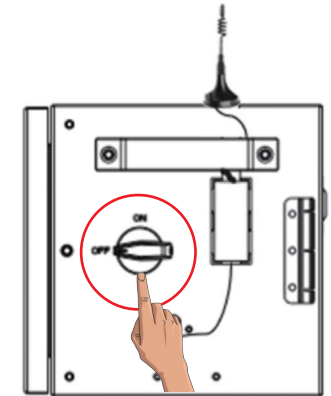
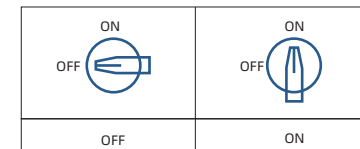
- Before powering on the equipment for the first time, the parameters shall be set correctly by professionals.
- Incorrect settings may lead to inconformity with the power grid requirements of the country/region, impacting the normal operation of the equipment.

7.9.1 Inspection Before Power-on

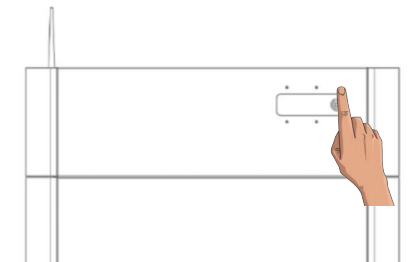
- Switches: All switches in the household circuit and all switches connected to the energy storage system are in the "OFF" state.
- Grounding: The ground wire is connected correctly and firmly.
- Cable connection: AC output line, DC input line, power line and signal line are connected correctly and firmly.
- Cable layout: The cable layout is reasonable and tidy to meet the user's requirements.
- Binding of cable ties: The cable ties shall be evenly distributed, and no sharp corner shall be caused at the cut.
- Installation of energy storage system : The installation is correct, firm and reliable.
- Installation environment: The installation space is reasonable, the environment is clean and tidy, and there are no construction remnants.
- Unused terminals and connectors: Put waterproof covers on unused terminals and connectors.

2. Power-On Commissioning

1. Confirm the connection between ESS battery cabinet and inverter before starting on at the first time. Turn the isolation switch of ESS battery cabinet and inverter switch to "on" (refer to inverter manual for specific inverter operation).



2. Press the start button. The equipment will be self-checked and started. If there is no fault, the equipment can be used normally.



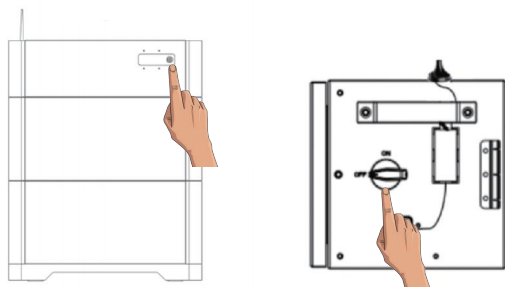
Startup: long press the startup button for 3S.
Shut down: long press the startup button for 5S.

3. If the device will not be used for a short time, press the start button and the device will go to sleep mode. If the equipment will not be used for a long time (two weeks), in addition to the above steps, turn the equipment isolating switch to "off".

See the table below for status indication

System state	Events	RUN light	ALM light	SOC	Note
Off	/	Lights off	Lights off	Lights off	
Standby	Normal	Light on	Lights off	Light on / display percentage according to electric volume	
	Alarm	Light on	Twinkle		
	Discharge protection	Lights off	Light on	Lights off	
Floating charge	Normal	Light on	Lights off	Light on / display percentage according to electric quantity	
	Alarm	Light on	Twinkle		
	Charging protection	Twinkle	Light on		
Charge	Normal	Twinkle	Lights off	Light on / display percentage according to electric volume	
	Alarm	Twinkle	Twinkle		
Discharge	Normal	Light on	Lights off	Light on / display percentage according to electric volume	
	Alarm	Light on	Twinkle		

7.9.2 System Power-off



Shutdown Procedure :

- 01, Turn off external grid and the air switch of Backup,
- 02, Press the button and the screen light is off,
- 03, Turn off DC switch.

Danger

The system may still be energized after power-off. Wait 10 minutes for the system to be completely powered off before performing any operation.

Maintenance

Danger

- Observe the User Manual and relevant international, national or regional standards, as well as industry-specific safety rules and practices.
- Power off the equipment before cleaning, electrical connection, grounding reliability check and other maintenance.
- After disconnecting all batteries and AC power supply, wait at least **10 minutes** for the system to be completely powered off before performing any operation.
- Please use special protective equipment and special insulation tools to avoid electric shock or short circuit.
- Do not smoke or use an open flame near the battery.
- Do not use wet rags, water or any solvent to clean bare interfaces or other parts that are electrically conductive.



Warning

- Do not maintain the battery with power on. Check the screw torque and tighten the screw after the battery is powered off.
- After discharge, recharge the battery in time. Otherwise the battery may be damaged due to over-discharge.
- Before moving or rewiring the equipment, cut off the input and output of the power supply. Wait **10 minutes** for the internal energy to be discharged completely. Start maintenance until you have confirmed with a multimeter that no hazardous voltage remains in the DC bus and the components to be repaired.
- Do not connect two or more cables in parallel at the positive and negative interfaces of the battery.
- When making cables, be sure to stay away from the equipment because the chippings may cause damage to either the personnel or the equipment.

8.1 Routine Maintenance

Maintenance items	Maintenance period
Check whether the shell is damaged. If so, please touch up the paint or contact the after-sales service center.	Once every 6 months
Check whether the exposed wires are worn. If so, please replace the corresponding cables or contact the after-sales service center.	Once every 6 months
Check whether there are sundries around the battery, if so, please clean them so as not to affect the heat dissipation of the battery.	Once every 6 months
Check for water or pests to avoid long-term intrusion into the battery.	Once every 6 months



ATTENTION

·If any problem that may affect the battery or energy storage inverter system is found, please contact the after-sales personnel. Disassembly without permission is prohibited.

- If it is found that the copper wire inside the conductive wire is exposed, do not touch it. The high voltage is dangerous, please contact the after-sales personnel. It is forbidden to disassemble it without permission.

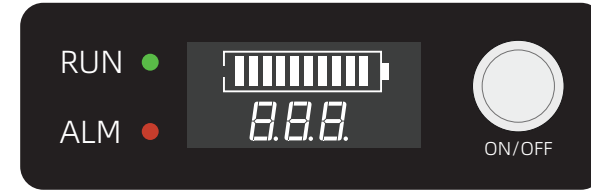
- In case of other emergencies, please contact the after-sales personnel at the first time, operate under the guidance of the after-sales engineer, or wait for the on-site operation of the after-sales engineer.

8.2 Troubleshooting

If the device does not work properly after you enable it, refer to the table to identify possible causes.

At the same time, check whether it is caused by external environment,

For example, the temperature and humidity do not meet the requirements or the load is overstressed. If the abovementioned measures don't work, please contact the after-sales service. Please have it professionally repaired.



RUN



● Battery runs normally

● Fault or shutdown

ALM



● Fault

● Battery runs normally or shutdown



Usable battery capacity

8.8.8

E03

Fault code

Error code	Meaning	Recovery condition
E03	High voltage of total battery system	Restart the machine
E04	Low voltage of total battery system	Restart the machine
E11	High voltage of single unit	Restart the machine
E12	Low voltage of single unit	Restart the machine
E15	High temperature of cell	Restart the machine
E16	Low temperature of cell	Restart the machine
E19	Large difference of cell pressure, the cell is not balanced	Restart the machine
E21	Large temperature difference of single cell	Restart the machine
E24	Charging current too high	Restart the machine
E25	Discharge current too high	Restart the machine

8.3 Emergency Response

In case of equipment abnormality and accident, take correct and effective measures in time to prevent further damage and loss.

01. Overheating:

When the temperature of the battery pack exceeds the upper limit of safe use, the management system will give a warning and ask to stop using it immediately.

02. Leakage:

If battery leakage occurs, evacuate the relevant personnel immediately and notify the technicians to handle the emergency on site. Do not restart the device before troubleshooting. Do not use a system with abnormality.

03. Short circuit:

If the product is short-circuited for various reasons, immediately evacuate the relevant personnel, cut off the power supply and the equipment (if possible), disconnect the battery from the equipment, and notify the technical personnel for repair and troubleshooting. The equipment and devices that have been severely short-circuited must be rigidly tested by the manufacturer before deciding whether they can continue to be used.

04. Collision:

For various reasons, if the equipment is impacted, deformed or pierced by foreign objects, the power cable of the equipment should be disconnected immediately. Notify professional technicians to be present for handling. In case of special circumstances, wearing necessary protective equipment before disassembly.

05. Fire:

Step 1: Evacuate the site personnel to an isolation area designated for safety purpose, and call firefighters.

Step 2: Under the precondition of ensuring personal safety, carry out the following operations if conditions permit:

- If the harness smokes and catches fire, use a carbon dioxide or dry powder fire extinguisher to put out the fire.
- If the energy storage battery is on fire, use a high-pressure water gun at a distance to put out the fire.
- If smoke is inhaled, evacuate and seek medical care ASAP.

Step 3: Inform the equipment manufacturer to obtain further treatment opinions.

06. Flooding

Step 1: Check whether the equipment is powered on or not, evacuate the site personnel to an isolation area designated for safety purpose.

Step 2: Inform the equipment supplier to carry out maintenance after the flood has faded.

Step 3: Do not start the system before the manufacturer confirms the system is safe to use.

8.3 Emergency Response

07. Other accidents:

When repairing or removing the equipment due to other accidents, disconnect the battery circuit first to avoid electrocution. Do not disassembly until you ensure that no short-circuit will occur. Check to confirm that no secondary damage will arise from collision, fall, inversion or other reasons.



Danger

- If any condition that may wreak havoc on the battery or equipment looms, please contact the after-sales personnel. Do not disassemble it without permission.
- If the copper wire inside the conductive wire is found exposed, it must not be touched. High voltage is fatal. Please contact the after-sales personnel. Do not disassemble it without permission.
- In case of other emergencies, please contact the after-sales personnel without delay for guide, or wait for the after-sales personnel to operate on site.

8.4 Battery Recycling

iPotisEdge does not recycle batteries. Please dispose of waste batteries according to local laws and regulations. Please do not dispose of batteries as domestic waste. Improper disposal of the battery may cause environmental pollution or explosion.

If there is no local recycling agency, customers are advised to contact the nearest national or regional recycling agency for disposal.



Warning

- If the battery leaks or is damaged, please contact the technical support personnel or the battery recycling company for the disposal.
- When the battery is out of its service life, please contact the battery recycling company for the disposal.
- Avoid exposing used batteries to high temperatures or direct sunlight.
- Avoid exposing used batteries to high humidity or corrosive environments.
- Secondary use of faulty batteries is prohibited. Contact the battery recycling companies ASAP to avoid environmental pollution.

Recycling process:

Step 1 Contact the nearest recycling agency.

Step 2 The recycling agency assesses the cost of recycling.

step 3 The recycling agency carries out recycling, which can be done in two ways:

On-the-spot recycling: The recycling agencies go to the spot where the Li-ion batteries are used to recycle the spent batteries. The service charge will be assessed according to the factors such as distance or transport cost.

Centralized recycling: Scrap Li-ion batteries are aggregated to a designated place to be recycled by the recycling agency.

9

After-sales Service

iPotisEdge offers a full range of technical supports and after-sales services. The free warranty is subject to the contract or warranty agreement. The following conditions are not within the scope of the free warranty services provided by the company:

Damage to the system or consequent failure due to operation not in accordance with the instruction manual.

Damage or malfunction caused by wiring and power supply not in accordance with the relevant electrical safety regulations, or due to poor site environment.

Damage to the system or malfunction caused by the user's unauthorized remodeling.

Damage or failure caused by force majeure such as typhoon, earthquake, flood, fire, or harsh

environment (high temperature, low temperature, high humidity, acid rain, etc.).

Failure of the user to maintain the initial state of device malfunction, and failure to notify the manufacturer in a timely manner and deal with the problem on their own, making it hard to identify the cause of the failure.

Should you have any questions about the equipment, please contact us. In order to provide you with faster and better services, please provide the following information:

- | | |
|---------------------|---------------------------------------|
| (1) Equipment model | (2) Equipment serial number (SN code) |
| (3) Fault code/name | (4) Brief description of the fault |