



I²-ESS SOLUTIONS

Green solar energy
connect the world with intelligence



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Directory

INTELLIGENT CONNECTION OF WORLD
WITH GREEN LIGHT ENERGY



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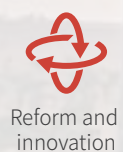
Service Support

Company Introduction



Science and technology

Cored by **science and technology**



Reform and innovation

Driven by **reform and innovation**



Brand

Forge the **brand** with credibility



Win-win

Create a better world on the basis of **win-win**



Intelligence & Integrity Energy Technology Co.,Ltd.

I² Energy Storage is one of the “I²” series brands of I² Energy Technology Co., Ltd. (the Company), a wholly-owned subsidiary of PowerChina Jiangxi Electric Power Construction Co., Ltd. The Company is specialized in R&D and application of energy storage technology.

The Company’s core business includes design, development, integration, operation & maintenance of energy storage system, in order to offer comprehensive energy storage solutions for clients.

Based on the profound insight and forward-looking strategic thinking for further trends of new energy market, the Company constantly improves the technical innovation foundation of products and techniques, which fully implies its strong core competitiveness.

The Company’s products and services cover the all-round demands from user energy storage to large energy storage power station, and can satisfy the customized demands for energy storage system.

180,000+

Number of employees

130+countries

Cover 130+ countries worldwide

Solutions

All-round customization

EPC

Integration and builder in EPC engineering field

Global Layout

Latin America
Jamaica
Brazil

Africa
Nigeria
Kenya

Middle East
Dubai

Southeast Asia
Philippines
Indonesia

Aussie
Australia

Central Asia
Iraq
Pakistan

Africa
Kenya



The Company's business has covered the entire world:
Nigeria in Africa, Brazil in Latin America, Philippines in Southeast Asia, Indonesia, Dubai in Middle East, Australia in Aussie, Central Asia and the Iraq-Pakistan Region, Kenya in Africa, etc.

Product Introduction



Solar Energy Storage Product Series

The Company's solar energy storage system solutions include "PV bracket + PV + solar energy storage AIO + battery" complete solutions. The Company has multiple solar energy storage AIOs and battery products which are applicable to the new solar energy storage power stations, transformation of former grid-connected systems or the areas with no (weak) power grid. The Company's solar energy storage system solutions can realize higher proportion of green electricity and reduce the expense of electricity; it can also provide backup power supply to avoid power outage of key equipment; users can master the power station conditions through the Company's Carbon Cloud and enjoy a low-carbon life.

Excellent Products and Services



Product Center

Low-Voltage Residential Products

ZXE-LW5120-D



Support a variety of communication protocols. support RS485,RS232, CAN, etc



Intelligent battery management system



Modular structure for easy installation



LED lights display the parameters of the equipment in real time



Long cycle life



Excellent security performance



appearance diagram of i² residential low-voltage stackable batteries product

• 5.12kWh

Items	Specifications		Remarks
Nominal Voltage	51.2 V		5.12kWh (51.2V 100Ah)
Nominal Capacity	100Ah		0.5C 25° C±2° C 2.5-3.65V
Nominal Energy	5.12 kWh		
Battery Type	LFP		
Max. Number of Parallel	16		
Charging limit voltage (Umax)	58.4V		
Discharge Cut-off Voltage (Umin)	44.8 V		
Cooling Method		Natural Cooling	
Rated Charging Current	50A		25° C±2° C, 0.5C
Maximum Continuous Charging Current	80A		25° C±2° C, 1C
Rated Discharge Current	50A		0.5C
Maximum Continuous Discharge Current	80A		25° C±2° C, 1C
Weight	51.5kg±1kg		/
Waterproof Grade	IP40		/
Warranty Period	5 Years		
Life Cycle	6000 Cycles		Capacity Retention: ≥ 70% (@90% DOD,0.5C,25° C)
Operation Temperature	Charging Temperature	0~60° C	/
	Discharging Temperature	-20-60° C	/
Storage Temperature	>1 month	0~35° C	Delivery SOC status
	≤ 1 month	-20~45° C	

—Technical parameters are as shown in table above—

Product Center

High-voltage Stackable Batteries
1P32S-HV SERIES



7*24h intelligent monitoring



Remote operation & maintenance



Ultra-long cycle life



Easy installation



Flexible capacity expansion

- 5.12kWh
- 10.24kWh
- 15.36kWh
- 20.48kWh



appearance diagram of i² residential high-voltage stackable batteries product

Battery pack quantity	1	2	3	4
Nominal energy (kWh)	5.12	10.24	15.36	20.48
Available energy (90% DOD) (kWh)	4.60	9.22	13.82	18.43
Rated voltage (V)	102.4	204.8	307.2	409.6
Working voltage range (V)	86.4~116.8	160~233.6	240~350.4	320~467.2
Dimensions (W*H*H) (mm)	800*375*460	800*545*460	800*715*460	800*885*460
Weight (kg)	104	164	223	282
Rated capacity (Ah)		50		
Rated charging/discharging current (A)		25 / 50		
Max. continuous charging/discharging current (A)		25 / 50		
Working temperature (°C)	Charging	0~50		
	Discharging	-10~55		
WIFI frequency range (MHz)		2400~2483		
Ambient temperature		20~60% (no condensation)		
Protection grade		Class I		
Waterproof grade		IP54		
Cooling mode		Natural cooling		
Cycle life (25°C, 0.5C, 90%DOD)		>6000 times		
Communication mode		CAN / RS485 / Wifi		
Quality warranty		10 years		

—Technical parameters are as shown in table above—

Product Center

ZXE-OGL5K-1PEU

SINGLE-PHASE HYBRID INVERTER

- 

Easy to install,smart setting through LCD
- 

Avariety of intelligent working modes
- 

Remote monitoring via APP or Web
- 

Support BMS communication
- 

Support parallel operation up to 9 units
- 

Can work with out battery



appearance diagram of i² residential single-phase hybrid inverter

- IP20
- 2-Year Warranty

TECHNICAL SPECIFICATION	
Model	ZXE-OGL5K-1PEU
ACINPUT	
Rated Voltage	208/220/230/240Va.c.,L+N+PE
Rated Frequency	50 Hz/60 Hz
Current(Maximum Continuous)	40Aa.c.
INVERTER OUTPUT	
Rated Power	5 kW
Rated Voltage	208/220/230/240Va.c.,L+N+PE
Power Factor	1
Wave Form	Pure Sine Wave
Switch Time	<10ms(Typical)
nverter Efficiency(Peak)	>94%
Current(Maximum Continuous)	22.7Aa.c.
Maximum Output Overcurrent Protection	102%~110%1min/110%~130%10s/130%~150%3s/150%0.2s
BATTERY	
Battery Type	Lithium/Lead-acid
Rated Battery Voltage	48Vd.c.
Battery Voltage Range	42~56.4Vd.c.
Max.Charge Current	80Ad.c.
PV INPUT	
No.of MPPT Tracker/Strings	1/1
Max.PVArray Power	6 kW
Max.DC Voltage	500Vd.c.
MPPT Voltage Range	120~430Vd.c.
Start-up Voltage	120Vd.c.
MPPT Maximum Charge Current	80Ad.c.
Max.Input Current	18Ad.c.
Isc PV(Absolute Maximum)	22Ad.c.
PROTECTION&FEATURE	
Parallel Function	Yes(up to 9pcs,optional)
Protection Degree	P20,Indoor only
Certifications	CE(IEC62109-1),EN61000 NRS
Other Protection	Overload,Over temperature,Short circuit
GENERAL PARAMETER	
Storage Temperatue	15°C~+60°C
Operating Temperature	-10°C~+50°C
Humidity	20%~95%(Non-condensing)
Operating Altitude	4000m(>1000 m Derating)
Noise	<50 dB
Machine Dimensions (W*H*D)	315*470*120 mm
Machine Weight/N.W.	8.6 kg
DISPLAY AND COMMUNICATION	
Display	LCD Display (Display Running Mode,Loads/Input/Output etc.)
Interface	RS485/CAN/Dry Contact/WiFi(Optional)

—Technical parameters are as shown in table above—

Product Center

High Voltage Hybrid Inverter
ZXE-HH5K~10K-3PEU

18A Max. PV input current 110% AC overloading 100% Unbalanced Loads

≤20ms transfer time Support AC retrofit application

Type II SPD for both DC and AC

Support parallel connection

- IP65
- 10-Year Warranty



appearance diagram of i² high voltage hybrid inverter

Model	ZXE-HH5K-3PEU	ZXE-HH6K-3PEU	ZXE-HH8K-3PEU	ZXE-HH10K-3PEU
PV Input				
Max. Recommended PV Power [Wp]	7500	9000	12000	15000
Max. PV Power for Single MPPT [Wp]	7500	9000	9000	9000
Max. PV Input Voltage [V]			1000	
MPPT Voltage Range [V]			160 ~ 950	
Rated PV Input Voltage [V]			600	
Start-up Voltage [V]			160	
No. of MPP Trackers			2	
No. of Input Strings per Tracker			1	
Max. PV Input Current [A]			18 / 18	
Max. Short-circuit Current [A]			23 / 23	
AC Output				
Max. AC Output Apparent Power [VA]	5500	6600	8800	11000 ^[1]
Rated AC Output Power [W]	5000	6000	8000	10000 ^[1]
Max. AC Output Current [A]	7.6	9.1	12.2	15.2 ^[1]
Rated AC Output Current [A]	7.2	8.7	11.5	14.4 ^[1]
Rated AC Voltage [V]		3 / N / PE, 220 / 380, 230 / 400		
Grid Frequency [Hz]		50 / 60		
Adjustable Power Factor [cosφ]		0.8 leading ~ 0.8 lagging		
Output THDi (@Rated Output)		< 3%		
AC Input				
Max. AC Input Apparent Power [VA]	10000	12000	16000	20000
Max. AC Input Current [A]	15.2	18.2	24.3	30.4
Rated AC Voltage [V]		3 / N / PE, 220 / 380, 230 / 400		
Grid Frequency [Hz]		50 / 60		
Battery				
Battery Type		Lithium		
Battery Voltage Range [V]		160 ~ 700		
Max. Charging / Discharging Current [A]		30 / 30		
Max.Charging / Discharging Power [W]	10000 / 5000	10000 / 6000	10000 / 8000	10000 / 10000
Communication Interface		CAN		
Backup Output (With Battery)				
Rated Output Power [W]	5000	6000	8000	10000
Rated Output Voltage [V]		3 / N / PE, 220 / 380, 230 / 400		
Rated Frequency [Hz]		50 / 60		
Rated Output Current [A]	7.6	9.1	12.2	15.2
Output THDv (@Linear Load)		< 3%		
Automatic Switch Time [ms]		≤ 20		
Peak Apparent Power, Duration [VA, s]	7500, 60	9000, 60	12000, 60	15000, 60
Efficiency				
Max. Efficiency	98.0%	98.0%	98.0%	98.0%
Euro Efficiency	97.7%	97.7%	97.7%	97.7%
Max. Battery Charge / Discharge Efficiency	97.6%	97.6%	97.6%	97.6%
Protection				
DC Insulation Monitoring		Integrated		
Input Reverse Polarity Protection		Integrated		
Anti-island Protection		Integrated		
Residual Current Monitoring		Integrated		
Over-heat Protection		Integrated		
AC Overcurrent Protection		Integrated		
AC Short-circuit Protection		Integrated		
AC Overvoltage Protection		Integrated		
DC Surge Protection		Integrated (Type II)		
AC Surge Protection		Integrated (Type II)		
DC Switch		Integrated		
General Data				
Dimensions (W * H * D) [mm]		520 * 412 * 186		
Weight [kg]		27		
Display		LED + OLED		
Communication		CAN, RS485, USB Update, Optional: WiFi, 4G, Ethernet		
Operating Temperature Range℃		-25 ~ +60		
Relative Humidity		0 ~ 100%		
Operating Altitude [m]		≤ 2000		
Standby Self-consumption [W]		< 15		
Topology		Transformerless		
Cooling		Natural		
Ingress Protection		IP65		
Noise [dB]		< 35		
Certifications & Standards				
Grid Regulation	AS 4777, EN 50549-1, EN 50549-PL, EN 50549-GR, EN 50549-CZ, TOR Erzeuger, CEI 0-21, C10 / C11, VDE0126, UNE 217002/RD647			
Safety Regulation	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2			
EMC	EN / IEC 61000-6-1, EN / IEC 61000-6-3			

[1] The Max. AC output apparent power & Max. AC output current of N3-HV-10.0-A is 11000VA & 15.2A.

Product Center

Single Phase Low Voltage Energy Storage Inverters

ZXE-HL(3-8)K-1PEU



Generator-compatible to extend backup duration during grid power outage



Multiple inverters can operate together to form a microgrid



Supports dual backup ports for intelligent control of critical and non-critical loads



10 seconds of 200% overload capability



Automatic switchover time is < 4ms, providing seamless transitions from grid to backup



Ensures excellent power supply stability, keeping the load unaffected by a weak grid or generator supply fluctuations



appearance diagram of i² single phase low voltage energy storage inverters

- 3K
- 3.6K
- 5K
- 6K
- 8K

Models	3K	3.6K	5K	6K	8K
Input DC (PV side)					
Recommended max. PV array size	6 kW	7.2 kW	10 kW	12 kW	16 kW
Max. usable PV input power	4.8 kW	5.76 kW	8 kW	9.6 kW	12.8 kW
Max. input voltage	500 V				
Rated voltage	330 V				
Start-up voltage	90 V				
MPPT voltage range	90 - 435 V				
Max. input current	16 A / 16 A				32 A / 32 A
Max. short circuit current	20 A / 20 A				40 A / 40 A
MPPT number / Max. input strings number	2 / 2				2 / 4
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	40 - 60 V				
Max. charge / discharge power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. charge / discharge current	70 A	80 A	112 A	135 A	190 A
Communication	CAN / RS485				
Output AC (Grid side)					
Rated output power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	3 kVA	3.6 kVA	5 kVA	6 kVA	8 kVA
Operation phase	L/N/PE				
Rated grid voltage	220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 2%				
Input AC (Grid side)					
Input voltage range	187 - 253 V				
Max. input current	21 A	25 A	32 A	40 A	50 A
Frequency range	45 - 55 Hz / 55 - 65 Hz				
Output AC (Back-up)					
Rated output power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	2 times of rated power, 10 s				
Back-up switch time	< 4 ms				
Rated output voltage	L/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. AC passthrough current	35 A	35 A	40 A	40 A	50 A
THDv (@linear load)	< 2%				
Efficiency					
Max. efficiency	96.2%				
EU efficiency	96.1%				
BAT charged by PV / AC max. efficiency	95.3% / 93.9%				
BAT discharged to AC max. efficiency	93.8%				
Protection					
Ground fault monitoring	Yes				
DC reverse-polarity protection	Yes				
Integrated AFCI 2.0	Optional				
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)				
General Data					
Dimensions (W × H × D)	335 × 560 × 253 mm				
Weight	23 kg			23.5 kg	
Topology	High frequency isolation (for battery)				
Operating ambient temperature range	-40 ~ +60°C				
Ingress protection	IP66				
Cooling concept	Natural cooling			Intelligent fan-cooling	
Max. operation altitude	3000 m				
Grid connection standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, NBR 16149, NBR 16150				
Safety / EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3				
Features					
DC connection	MC4 plug (PV port) / Terminal Block (BAT port)				
AC connection	Terminal Block				
Display	7.0" LCD display & Bluetooth + APP				
Communication	RS485, CAN, Optional: Wi-Fi, GPRS, LAN				

—Technical parameters are as shown in table above—

Solution

Family house PV + energy storage

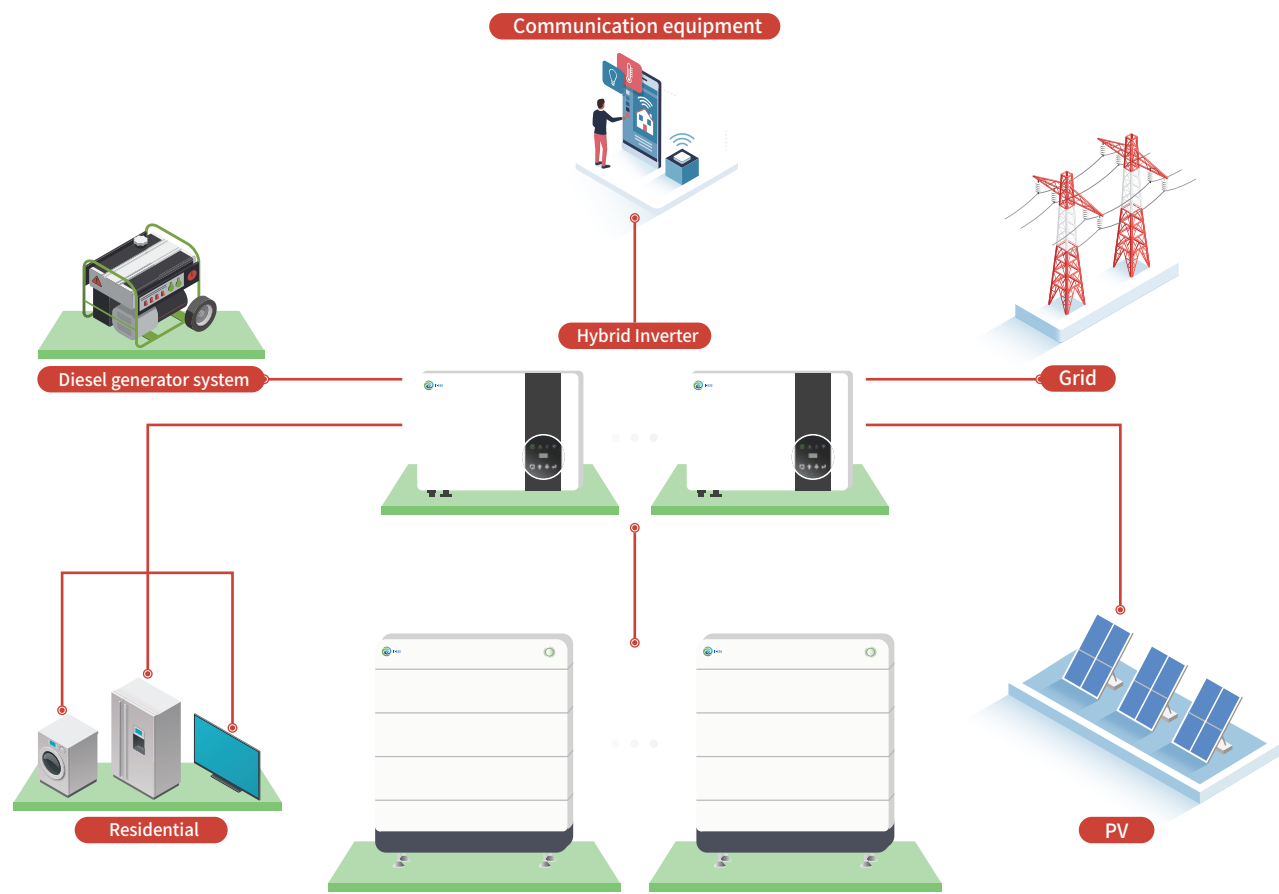


Solution

Family house solar energy storage system

System characteristics:

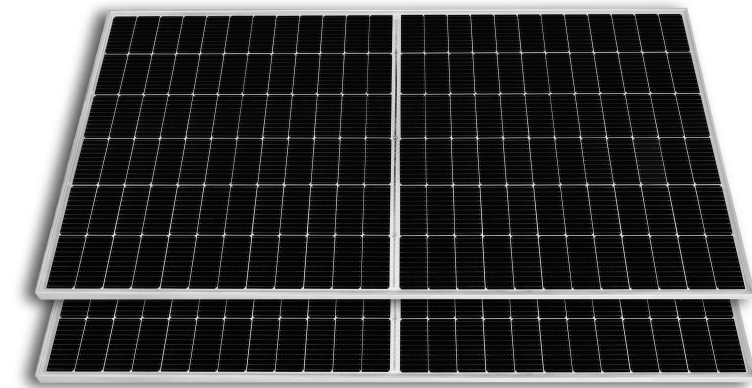
- Applicable to all common glazed tile roof, the tiles at different height, has high adjustability of Rack mounting and easy installation
- The materials of main load-bearing parts can be selected according to the load and specification, to control the bracket cost effectively while ensuring the structural safety
- The stainless steel and the aluminum alloy that has anodic oxidation treatment are used, to have stylish appearance and excellent resistance to corrosion



topological graph of family house pv + energy storage

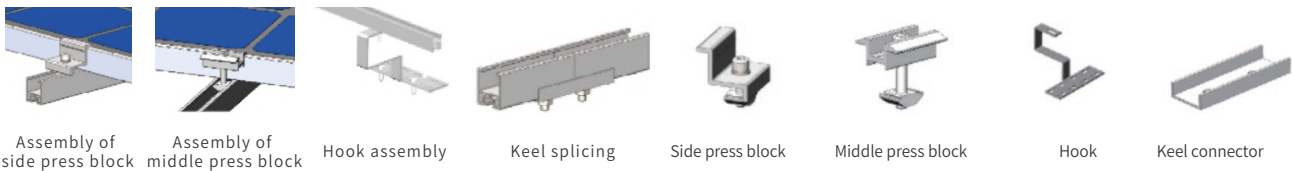
Half-piece double-sided double-glass modules:

- 535W MBB



—Product diagram—

PV module:



Component specification:	Unlimited	Max. snow load:	1.4KN/m ² (customizable)
Component arrangement:	Horizontal/vertical	Material:	Stainless steel + aluminum alloy
Component tilt angle:	Parallel to roof	Surface treatment:	Anodic oxidation
Foundation form:	Metal hook	Designed life:	25 years
Max. wind load:	40m/s (customizable)	Term of warranty:	15 years

—Parameters are shown in table above—

Product Center

Commercial & Industrial Energy Storage All In One System
1P260S SERIES



Cell of three “high” energy storage



Intelligent fire control



Safe and efficient PCS



Cabinet temperature difference ≤3℃



High integration



Support access to cloud platform

- 100kW/233kWh
- 125kW/261kWh



appearance diagram of i² commercial & industrial energy storage all in one system cabinet

DC parameters (280Ah)			
Battery type	Lithium iron phosphate	Cooling mode	Battery compartment liquid cooling
Rated capacity	280Ah	Cycle life	≥6000 times
Rated energy	232.96kWh	Fire system	Perfluoro firefighting
Rated voltage	832V	Detector type	Smoke, temperature, carbon monoxide, VOC
Voltage range	728V~936V	Charging/discharging conversion time	<100ms
Combination mode	1P260S		
AC parameters			
Rated output voltage	400VAC	Power factor	-0.99~+0.99
Rated output frequency	50Hz/60Hz	System efficiency	≥89%
Rated AC output power	125KVA	Off-grid output THDU	≤3% (linear full load)
Distortion factor of current total harmonic	<3%	Unbalanced load capacity	100%
System parameters			
System life	≥15 years	Application altitude	≤2000m
Working temperature	-20℃~50℃	Cabinet weight	≤2600kg
Ambient humidity	≤95%	Cabinet dimensions (W*D*H mm)	1200*1500*2350
IP protection grade	IP54	Communication port	RS-485/RJ45Ethernet
Anti-corrosion grade	C4	Running mode	3-phase 4-wire, on-grid, off-grid
DC parameters (314Ah)			
Battery type	Lithium iron phosphate	Cooling mode	Battery compartment liquid cooling
Rated capacity	314Ah	Cycle life	≥6000 times
Rated energy	261.248kWh	Fire system	Perfluoro firefighting
Rated voltage	832V	Detector type	Smoke, temperature, carbon monoxide, VOC
Voltage range	728V~936V	Charging/discharging conversion time	< 100ms
Combination mode	1P260S		
AC parameters			
Rated output voltage	400VAC	Power factor	-0.99~+0.99
Rated output frequency	50Hz/60Hz	System efficiency	≥89%
Rated AC output power	125KVA	Off-grid output THDU	≤3% (linear full load)
Distortion factor of current total harmonic	<3%	Unbalanced load capacity	100%
System parameters			
System life	≥15 years	Application altitude	≤2000m
Working temperature	-20℃~50℃	Cabinet weight	≤2600kg
Ambient humidity	≤95%	Cabinet dimensions (W*D*H mm)	1200*1500*2350
IP protection grade	IP54	Communication port	RS-485/RJ45Ethernet
Anti-corrosion grade	C4	Running mode	3-phase 4-wire, on-grid, off-grid

—Technical parameters are as shown in table above—

Product Center

Battery System Specification – Mini Grid –102kwh/215kwh
BATTERY CABINET



Compatible to Various Inverters



Modular Design



Easy Installation and Maintenance



appearance diagram of i² battery system specification – mini grid –102kwh/215kwh

- 102kWh
- 215kWh

Model	ZXE-Box100	ZXE-Box200
Battery Parameter		
Battery Capacity (kWh)	102	215
Cell Type/V/Ah	LFP 3.2/100	LFP 3.2/280
Battery Module Capacity (kWh)	5.12	14.33
Number of Models	20pcs(10~20pcs Optional)	15pcs(10~15pcs Optional)
Rate Voltage(V)	512	768
Voltage Range (V)	448-576	672-864
System Configuration	2P160S	1P240S
Charge and Discharge Rate	≤0.5P	≤0.5P
Cooling Mode	Air cooling/1.5kW	Air cooling/3kW
General Parameter		
System Efficiency	≥ 94%	≥ 94%
Operating Temperature Range (°C)	-20-50	-20-50
Operating Humidity	5%-95%R.H	5%-95%R.H
IP Rating	IP55	IP55
Anticorrosion Grade	C4	C4
Altitude (m)	<3000	<3000
Dimension:W*D*H (mm)	1200*900*2060	1050*1190*2339
Weight (T)	1.4	2.3
Firefighting System	Integrated/Aerosol	Integrated/Aerosol
Communication Port	CAN, RS485, ETH	CAN, RS485, ETH

—Technical parameters are as shown in table above—

Product Center

Battery System Specification – Mini Grid – 50kw/102kwh
BATTERY CABINET



Easy to Install and Maintain



Flexible Deployment



Applicable to Various Scenarios



appearance diagram of i² battery system specification – mini grid – 50kw/102kwh

- 50kW/102kWh
- 50kW/215kWh

Model	ZXE-Box100-HH50	ZXE-Box200-HH50
Battery Parameter		
Battery Capacity (kWh)	102	215
Cell Type/V/Ah	LFP 3.2/100	LFP 3.2/280
Rate Voltage(V)	512	768
System Configuration	2P160S	1P240S
Charge and Discharge Rate	≤0.5P	≤0.5P
Cooling Mode	Air cooling/1.5kW	Air cooling/3kW
AC On-grid Parameter		
Rated Charge/Discharge Power (kW)	50	50
Rated Grid Voltage Range (V)	380-400	380-400
Applicable Grid Frequency (Hz)	50/60	50/60
MAX.. Output Current (A)	83	83
THDi	<3%	<3%
PV Parameter		
MAX. Input Power (kW)	75	75
MPPT Voltage Range (V)	200~850	200~850
General Parameter		
Dimension:W*D*H (mm)	1560*900*2060	1412*1190*2339
Weight (T)	1.5	2.5
Firefighting System	Integrated/Aerosol	Integrated/Aerosol
Communication Port	CAN, RS485, ETH	CAN, RS485, ETH

—Technical parameters are as shown in table above—

Product Center

Battery System Specification – Mini Grid – 241kwh
BATTERY CABINETAIR COOLING



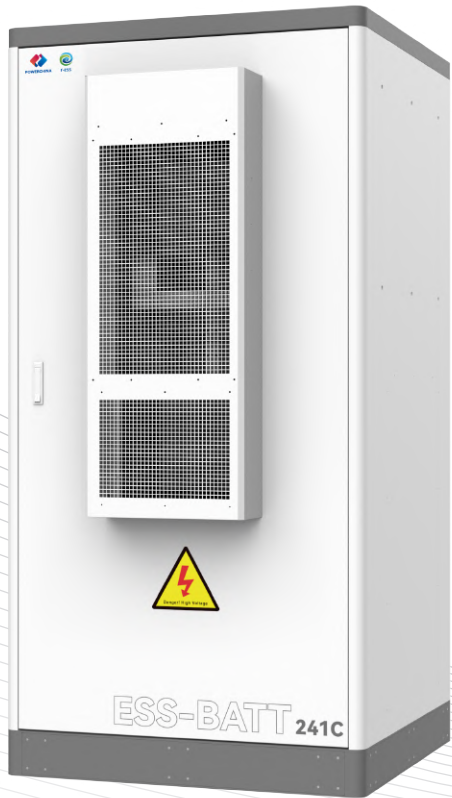
Compatible to Various Inverters



Modular Design



Easy Installation and Maintenance



appearance diagram of i² battery system specification – mini grid – 241kwh

Model	ZXE-Box241-NC
Battery Parameter	
Battery Capacity (kWh)	241
Cell Type/V/Ah	LFP 3.2/314
Battery Module Capacity (kWh)	16.076
Number of Models	15pcs(10~15pcs Optional)
Rate Voltage(V)	768
Voltage Range (V)	672-864
System Configuration	1P240S
Charge and Discharge Rate	≤0.5P
Cooling Mode	Air cooling/3kW
General Parameter	
System Efficiency	≥ 94%
Operating Temperature Range (°C)	-20-50
Operating Humidity	5%-95%R.H
IP Rating	IP55
Anticorrosion Grade	C4
Altitude (m)	<3000
Dimension:W*D*H (mm)	1150*1100*2300
Weight (T)	2.5
Firefighting System	Integrated/Aerosol
Communication Port	CAN, RS485, ETH

—Technical parameters are as shown in table above—

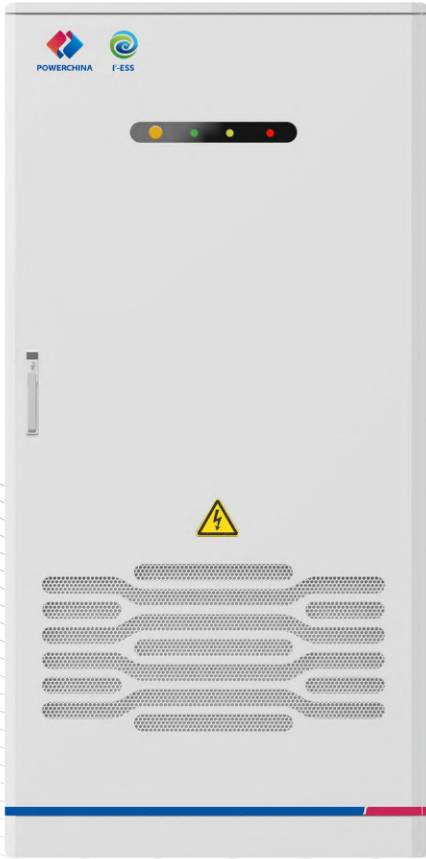
Product Center

Battery System Specification – Mini Grid – 241kwh
241KWH BATTERY CABINET – LIQUID COOLING

Compatible to Various Inverters

Liquid Cooling Design

Easy Installation and Maintenance



appearance diagram of i² battery system specification – mini grid – 241kwh

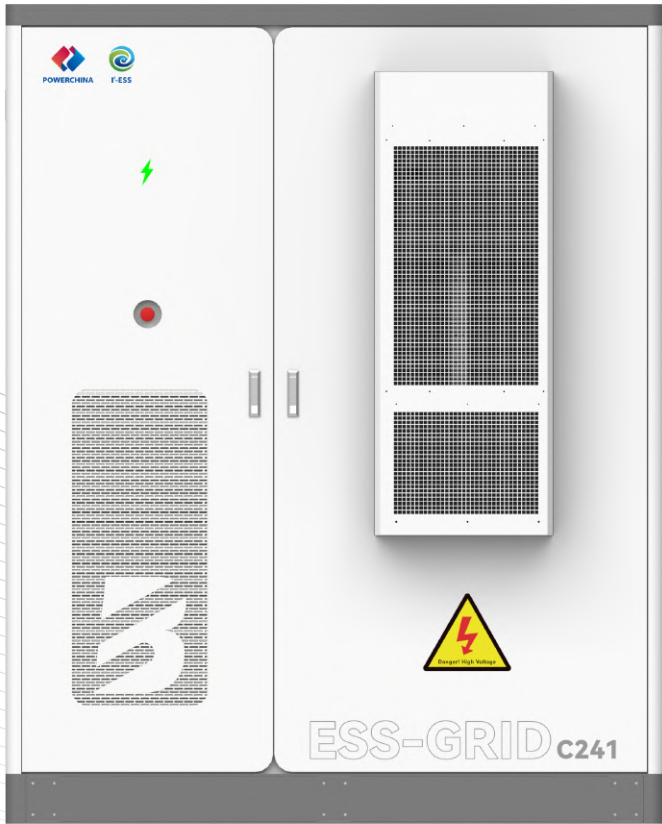
Model	ZXE-Box241-LC
Battery Parameter	
Battery Capacity (kWh)	241
Cell Type/V/Ah	LFP 3.2/314
Battery Module Capacity (kWh)	48.23
Number of Models	5pcs(3~5pcs Optional)
Rate Voltage(V)	768
Voltage Range (V)	672-864
System Configuration	1P240S
Charge and Discharge Rate	≤0.5P
Cooling Mode	Liquid cooling/3kW
General Parameter	
System Efficiency	≥ 94.5%
Operating Temperature Range (°C)	-20-50
Operating Humidity	5%-95%R.H
IP Rating	IP55
Anticorrosion Grade	C4
Altitude (m)	<3000
Dimension:W*D*H (mm)	1000*1400*2100
Weight (T)	2.6
Firefighting System	Integrated/Aerosol
Communication Port	CAN, RS485, ETH

—Technical parameters are as shown in table above—

Product Center

Battery System Specification – Mini Grid – 105kw/241kwh
BATTERY SYSTEM AIR COOLING

-  All In One Design
-  Flexible Deployment
-  Applicable to Various Scenarios



appearance diagram of i² battery system specification –
mini grid – 105kw/241kwh

Model	ZXE-Box241-HH105
Battery Parameter	
Battery Capacity (kWh)	241
Cell Type/V/Ah	LFP 3.2/314
Rate Voltage(V)	768
Voltage Range (V)	672-864
System Configuration	1P240S
Charge and Discharge Rate	≤0.5P
Cooling Mode	Air cooling/3kW
PV Parameter	
Max PV Power (kW)	50*2
Max PV Voltage (V)	600
MPPT Voltage Range (V)	200~600
AC Parameter	
Rate Power (kW)	105
Transformer (kVA)	100
AC Voltage (V)	230/400
Voltage Range	-20%~15%
Grid Frequency Range (Hz)	50/60
Power Factor	0.99
Off grid Function	Automatic switching / manual
General Parameter	
System Efficiency	≥ 88%
Operating Temperature Range (°C)	-20-55
Operating Humidity	5~95%R.H
IP rating	IP54, C4
Altitude (m)	<3000
Dimension:W*D*H (mm)	1800*1266*2319
Weight (T)	2.9
Firefighting System	Integrated/Aerosol
Communication Port	ETH

—Technical parameters are as shown in table above—

Product Center

Battery System Specification – Mini Grid – Combined Cabinet
OUTDOOR COMBINED CABINET SOLUTION

- Modular Design
- Wide Range Power and Capacity
- Applicable to Various Scenarios



appearance diagram of i² battery system specification – mini grid – combined cabinet

Model	ZXE-Box215-HH100	ZXE-Box430-HH150	ZXE-Box430-HH250	ZXE-Box645-HH250	ZXE-Box860-HH250	ZXE-Box1075-HH500
Battery Parameter						
Battery Capacity (kWh)	215	430	430	645	860	1075
Cell Type/V/Ah	LFP 3.2/280	LFP 3.2/280	LFP 3.2/280	LFP 3.2/280	LFP 3.2/280	LFP 3.2/280
Rate Voltage(V)	768	768	768	768	768	768
System Configuration	1P240S	1P240S*2	1P240S*2	1P240S*3	1P240S*4	1P240S*5
Charge and Discharge Rate	≤0.5P	≤0.5P	≤0.5P	≤0.5P	≤0.5P	≤0.5P
Cooling Mode	Air cooling	Air cooling	Air cooling	Air cooling	Air cooling	Air cooling
PV Parameter						
Max PV Power (kW)	120 or 180	180 or 240	300 or 360	300 or 360	300 or 360	600 or 720
Max PV Voltage (V)	600	600	600	600	600	600
MPPT Voltage Range(V)	450~600	450~600	450~600	450~600	450~600	450~600
AC Parameter						
Rated Power (kW)	100	150	250	250	250	500
Rated Voltage (V)	400	400	400	400	400	400
Voltage Range (V)	-10%~10%	-10%~10%	-10%~10%	-10%~10%	-10%~10%	-10%~10%
Rated Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
AC Connection	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE
General Parameter						
System Efficiency	≥ 88%	≥ 88%	≥ 88%	≥ 88%	≥ 88%	≥ 88%
Operating Temperature Range (°C)	-20-55	-20-55	-20-55	-20-55	-20-55	-20-55
Operating Humidity	5%-95%R.H	5%-95%R.H	5%-95%R.H	5%-95%R.H	5%-95%R.H	5%-95%R.H
IP Rating	IP54, C4	IP54, C4	IP54, C4	IP54, C4	IP54, C4	IP54, C4
Altitude (m)	<3000	<3000	<3000	<3000	<3000	<3000
Dimension:W*D*H (m)	2.65*1.45*2.34	3.7*1.45*2.34	4.5*1.45*2.34	5.55*1.45*2.34	6.6*1.45*2.34	8.95*1.45*2.34
Weight (T)	4.7	6.1	7.4	9.7	11.9	16.3
Firefighting System	Integrated Aerosol	Integrated Aerosol	Integrated Aerosol	Integrated Aerosol	Integrated Aerosol	Integrated Aerosol
Communication Port	CAN, RS485, ETH	CAN, RS485, ETH	CAN, RS485, ETH	CAN, RS485, ETH	CAN, RS485, ETH	CAN, RS485, ETH
Compliance	IEC62619, UN3480	IEC62619, UN3480	IEC62619, UN3480	IEC62619, UN3480	IEC62619, UN3480	IEC62619, UN3480

—Technical parameters are as shown in table above—

Product Center

Battery System Specification – Mini Grid 20FT ALL IN ONE SOLUTION



Standard 20FT ALL
in One Design



Pre-Populate Design for
Easy Transportation



Applicable to Various
Scenarios



appearance diagram of i² battery system specification – mini grid – combined cabinet

Model	ZXE-Cube860 -HH500	ZXE-Cube1075 -HH500	ZXE-Cube1290 -HH250	ZXE-Cube645 -HH250
Battery Parameter				
Battery Capacity (kWh)	860	1075	1290	1290
Cell Type/V/Ah	LFP 3.2/280	LFP 3.2/280	LFP 3.2/280	LFP 3.2/280
Rate Voltage(V)	768	768	768	768
System Configuration	1P240S*4	1P240S*5	1P240S*6	1P240S*6
Charge and Discharge Rate	≤0.5P	≤0.5P	≤0.5P	≤0.5P
Cooling Mode	Air cooling	Air cooling	Air cooling	Air cooling
PV Parameter				
Max PV Power (kW)	600/720	600/720	600/720	600/720
Max PV Voltage (V)	600	600	600	600
MPPT Voltage Range(V)	450~600	450~600	450~600	450~600
AC Parameter				
Rated Power (kW)	500	500	250	500
Rated Voltage (V)	400	400	400	400
Voltage Range (V)	-10%~10%	-10%~10%	-10%~10%	-10%~10%
Rated Frequency (Hz)	50/60	50/60	50/60	50/60
AC Connection	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE
General Parameter				
System Efficiency	≥ 88%	≥ 88%	≥ 88%	≥ 88%
Operating Temperature Range (°C)	-20-55	-20-55	-20-55	-20-55
Operating Humidity	5%-95%R.H	5%-95%R.H	5%-95%R.H	5%-95%R.H
IP Rating	IP54, C4	IP54, C4	IP54, C4	IP54, C4
Altitude (m)	<3000	<3000	<3000	<3000
Dimension:W*D*H (mm)	6058*2438*2591	6058*2438*2591	6058*2438*2591	6058*2438*2591
Weight (T)	14	15.5	15.8	17
Firefighting System	Integrated Aerosol	Integrated Aerosol	Integrated Aerosol	Integrated Aerosol
Communication Port	CAN, RS485, ETH	CAN, RS485, ETH	CAN, RS485, ETH	CAN, RS485, ETH
Compliance	IEC62619, UN3536	IEC62619, UN3536	IEC62619, UN3536	IEC62619, UN3536

—Technical parameters are as shown in table above—

Solution

Industrial park PV + energy storage



PV prioritized, supply residual electricity to grid



Time-sharing charging



Stable power supply, auto charging after grid connection

Solution

Industrial and commercial PV + Energy storage



—School—



—Government—



—Bank—



—Hospital—

Solution

Shopping mall and market, hospital PV + energy storage

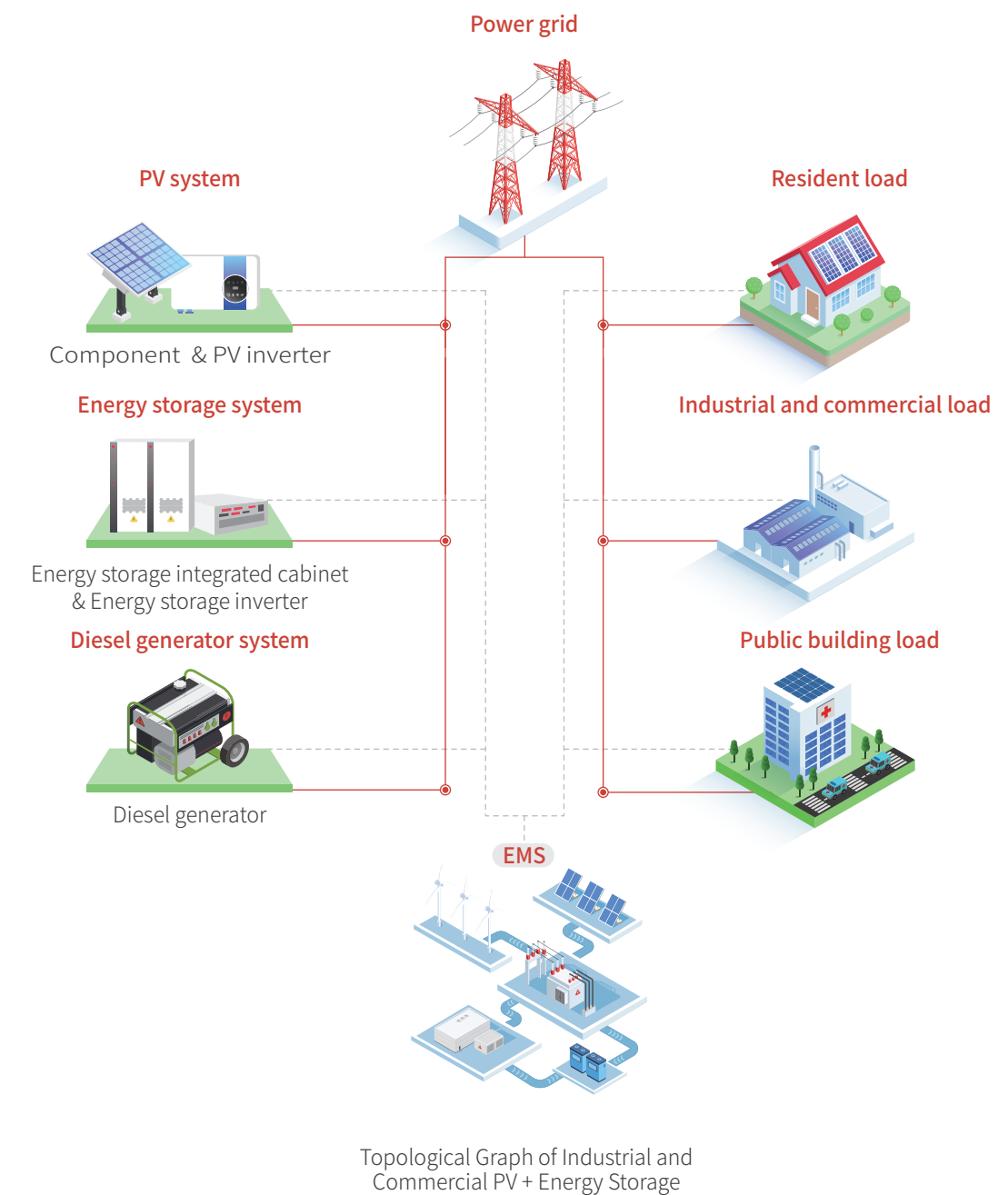


—Application in shopping mall and market—



—Hotel application—

Industrial and commercial PV energy storage
diesel power generation system



Industrial and commercial energy storage inverter:

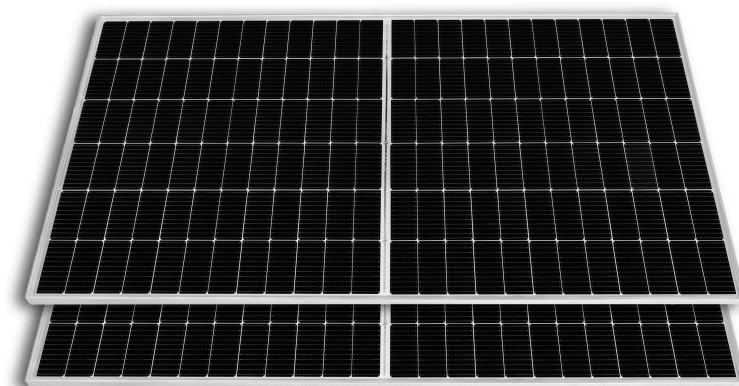
- Silicon carbide semiconductor adopted, with the max. conversion efficiency up to 99%
- PCS and BMU have intelligent integration with high-voltage box, integrated design
- Active/reactive quadrant regulation functions
- Support constant-power, constant-current and constant-voltage control
- Low harmonic control, 3-phase power imbalance governance
- 3-phase 4-wire system, satisfy off-grid use



—Product diagram—

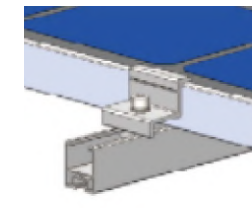
Half-piece double-sided double-glass modules:

- 535W MBB

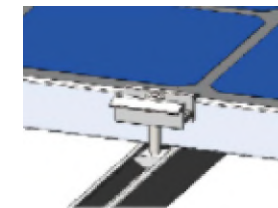


—Product diagram—

PV module:



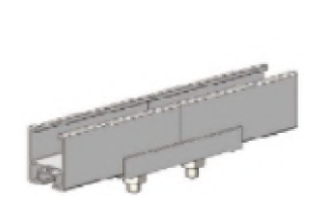
Assembly of side press block



Assembly of middle press block



Hook assembly



Keel splicing



Side press block



Middle press block



Hook



Keel connector

Component specification:	Unlimited	Max. snow load:	1.4KN/m ² (customizable)
Component arrangement:	Horizontal/vertical	Material:	Stainless steel + aluminum alloy
Component tilt angle:	Parallel to roof	Surface treatment:	Anodic oxidation
Foundation form:	Metal hook	Designed life:	25 years
Max. wind load:	40m/s (customizable)	Term of warranty:	15 years

—Parameters are shown in table above—

Service Support



Q1:What's the difference between high and low-voltage product series?

A1:High-voltage series products apply to the scenarios with high requirements for power quality, while low-voltage series products apply to price-sensitive scenarios; the difference between the two lies in battery selection, electrical component selection, mechanism design and electrical design. Under the same power demand, the high-voltage product is designed with high voltage and low current, while the low-voltage product is designed with low voltage and high current. Both of them are consistent in safety and quality design, even if the design is different. Please rest assured.

Q&A (Q&A) - Technical Sector

Q2:How can I select the product?

A2:Dear customer, you can firstly tell us the specific electrical equipment and usage of your house, so we can design a scheme for you according to the actual conditions, to satisfy your demands with the min. cost. The general household electricity circuit is divided into six circuits: One circuit for the main switch, one circuit for the whole house lighting, one circuit for every 10 ordinary sockets, one circuit for high-power electrical sockets (such as refrigerators and air conditioners), one circuit for the kitchen and one circuit for the bathroom. The classification method of household appliances has not been unified in the world. However, the products can be roughly divided into 8 categories by product function and application. ①Refrigeration appliance. Including household refrigerators, cold drinks machines, etc. ②Air conditioner. Including room air conditioner, electric fan, ventilator, cold and hot air blower, air dehumidifier, cold air blower, humidifier, etc. ③Cleaning appliance. Include laundry machines, clothes dryers, electric irons, vacuum cleaners, floor polisher, sweeping robots, etc. ④Kitchen appliance. Include electric cookers, microwave ovens, electromagnetic cookers, electric ovens, electric cookers, dish washers, electric water heaters, food processors, etc. ⑤Electric heater. Including electric blankets, electric quilts, water-heated mattress pads, electric heating clothing and space heaters. ⑥Cosmetic health appliance. Including electric shavers, hair dryers, curling irons, ultrasonic face washers and electric massagers. ⑦Audio-visual appliance. Including mini-projector, TV sets, radios, tape recorders, video recorders, video cameras, music centers, etc. ⑧ Other electrical appliances, such as fireworks alarm, electric bell, etc. The comprehensive daily electricity demand power is generally 5kW~10kW. Our products range from 5kWh~30kWh, which can be selected as required.

Q3:How can I install it?

A3:Our products need simple connection only, and the connected parts have error-proof and foolproof functions, are equipped with safe air switch and three-level electrical protection (air-opening, relay, BMS). Please refer to our product manual for the specific installation process.

Q4:How to do maintenance?

A4:Our products are maintenance-free and fitted with running status monitoring function, and no human intervention is required under normal circumstances. For any fault, you're suggested to call our after-sales telephone and we will make timely response online for 24h.

Q5:Is upgrade function available?

A5:Our products support hardware upgrade and software upgrade. The hardware upgrade is divided into capacity expansion (power increase) and core components upgrade, which need to be upgraded on site and we provide supporting services; software upgrade can be realized online, but you need to open the backstage (for your electricity safety, we must get your permission before accessing your backstage).

Q6:Is parallel connection function available?

A6:Yes, our products have the parallel function of the same model, and up to 4 machines can have parallel connection.