SolarEast

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SolarEast Clean Energy Solutions

CATALOG

SolarEast Energy Storage Technology Co., Ltd

Power Just In 'Case'

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01 SOLAREAST INTRODUCTION

5
Production bases across China

26
Years' experience

6,000+
Employees

Founded in 1999, SolarEast is a technological innovation-based enterprise that is publicly listed on Shanghai Stock Exchange (Stock code: 603366). Committed to making a 'Green world, Better life', SolarEast is a global leader in solar thermal industry and ranks Top 500 global new energy enterprises. SolarEast has established five production bases across China.

SolarEast Energy Storage Technology Co., Ltd is a wholly-owned subsidiary of SolarEast. It specializes in R&D, manufacturing and sales of energy storage products of various specifications that are widely used in residential, commercial & industrial, and large-scale applications. Furthermore, the Company also smartly incorporates energy storage with PV, air-source heat pumps and EV chargers, providing customers with flexible All-in-One solutions.

2 GWh
Annual residential ESS production capacity

10 GWh
Annual production capacity of Commercial & Industrial ESS and Large-scale ESS

Strong Manufacturing Capability

SolarEast owns 25 years' experience in solar thermal, heat pump and energy storage production. It has established five modern production bases across China and boasts 12GWh annual production capacity of energy storage systems.

Luoyang base

Built in 2002
BESS production base
Solar heater production base

Tibet base

Built in 2020
Large flat plate solar thermal collector production base

Shunde base

Built in 2012
Heat pump production base

Yuyao base

Built in 1984
Kitchen appliance production base
Electric water heater production base

Lianyungang base

Built in 1999
Solar heater production base
Water Purifier production base
Heat pump production base

Advanced Laboratory and Equipment

CNAS Accredited Lab

The laboratory, accredited by CNAS, is equivalent to a national testing center.

Postdoctoral Research Workstation

In 2010, it was jointly established by the Ministry of Human Resources and Social Security and the National Postdoctoral Management Committee

Nationally recognized enterprise technology center

The nationally recognized enterprise technology center is a testament to our strengths on scientific research and technological innovation.

Solar simulator

SolarEast is the first company in China to have introduced the indoor solar testing equipment, which simulates sunlight to test the solar thermal products

Main Business & Market Position

World's largest manufacturer in the solar thermal industry

Well-known EPC contractor in the PV industry in Jiangsu China

Top OEM supplier of heat pump in China

One of the fastest growing energy storage manufacturers in China

Integrated solution provider featuring PV + ESS + Heat Pump +EV Charger

Global Sales Network

Up to date, SolarEast has provided clean energy solutions for up to 35 million families and 20,000 enterprises in more than 80 countries and regions. With multiple overseas warehouses and branch offices worldwide, such as China, Europe and USA, SolarEast is able to offer global customers products and services in a timely and effective manner.

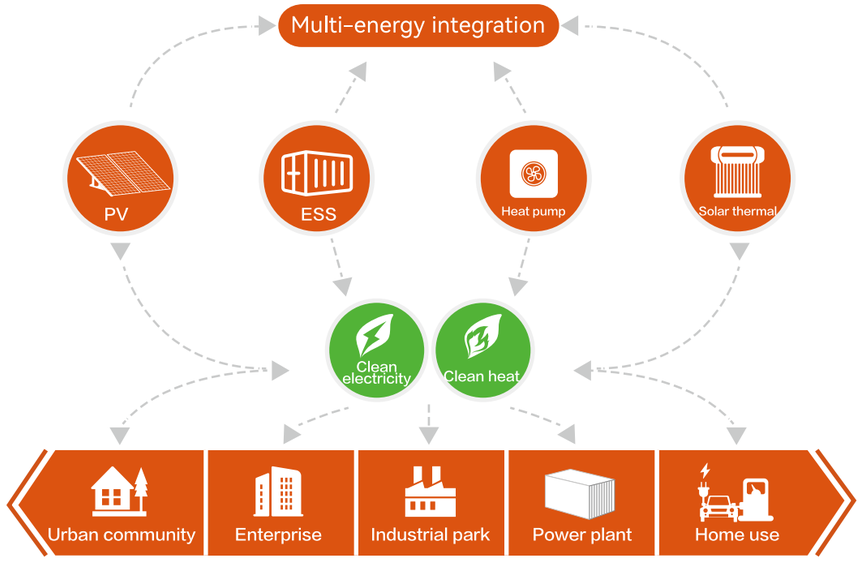
Comprehensive Clean Energy Solution

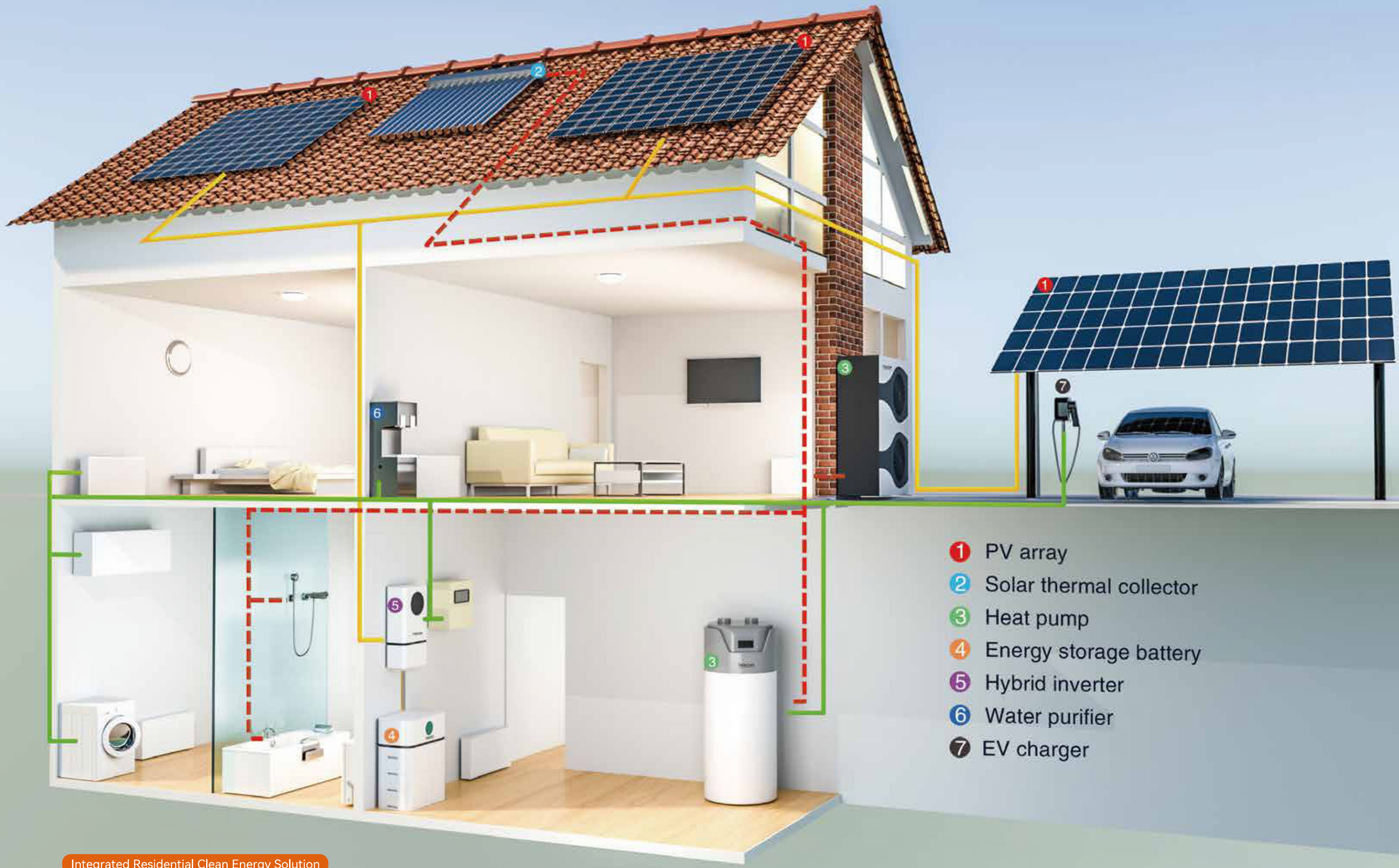
Multi-energy integration: PV, energy storage, heat pump, and solar thermal energy

Application scenarios: Power supply side, grid side

Commercial & industrial users, homes, and communities, etc

Energy type: Clean electricity, clean thermal energy





Integrated Residential Clean Energy Solution

02 BATTERY ENERGY STORAGE PRODUCTS

Stack-mounted Residential ESS

Features & Advantages

Safety
LFP Battery, Intelligent BMS and protective hardware providing complete protection

Easy Installation
Scalable up to 56 packs

Accuracy
Dynamic SOC calibration

Durability
6,000 cycles at 95% DOD

Compatibility
Suitable for most mainstream inverters

Certificates
IEC62619, IEC63056, IEC62477-1, IEC60730, UN38.3, MSDS, IEC61000, IEC62040

Technical Specifications

Model	PowerCool-LFP-HV2					
Battery type	LFP					
Number of connection	2pcs	3pcs	4pcs	5pcs	6pcs	7pcs
Total energy	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh	35.84kWh
Usable energy	9.72kWh	14.59kWh	19.45kWh	24.32kWh	29.18kWh	34.04kWh
Max.parallel strings	8P					
Voltage	102.4V	153.6V	204.8V	256V	307.2V	358.4V
Nominal charging voltage	115.2V	172.8V	230.4V	288V	345.6V	403.2V
Max. charging current	50A					
Nominal discharging current	50A					
Discharge cut-off voltage	89.6V	134.4V	179.2V	224V	268.8V	313.6V
Battery efficiency	95%					
Battery Protection	Over-current/Over-voltage/Short-circuit/Under-voltage/Over temperature					
Maximum recommended DOD	95%					
Communication	CAN,RS485					
IP rating	IP66					
Operating temperature	0 ~ 55℃					
Altitude	≤5,000m					
Humidity	5% ~ 95%					
Warranty	10 years (5 free warranty + 5 paid warranty)					
Dimension	(660±2) * (390±2) * (515±3) mm	(660±2) * (390±2) * (665±3) mm	(660±2) * (390±2) * (815±7) mm	(660±2) * (390±2) * (965±9) mm	(660±2) * (390±2) * (1115±9) mm	(660±2) * (390±2) * (1265±9) mm
Net weight	(117±2)kg	(152±4)kg	(197±6)kg	(242±8)kg	(287±8)kg	(332±8)kg
Certificates	CE-EMC,IEC62619,IEC62477,IEC62040,IEC62100,IEC60068-2-52,IEC60730,UN38.3,MSDS					
Installation	Stacked Installation					

Stack-mounted Residential ESS

Features & Advantages

Safety
LFP Battery, Intelligent BMS and protective hardware providing complete protection

Easy Installation
Stackable up to 7 packs

Accuracy
Dynamic SOC calibration

Durability
6,000 cycles at 95% DOD

Compatibility
Suitable for most mainstream inverters

Certificates
IEC62619, IEC63056, IEC62477-1, IEC60730, UN38.3, MSDS

Technical Specifications

Model	PowerCool-LFP-LV						
Battery type	LFP						
Number of connection	1pcs	2pcs	3pcs	4pcs	5pcs	6pcs	7pcs
Total energy	5.22kWh	10.44kWh	15.66kWh	20.88kWh	26.11kWh	31.33kWh	36.55kWh
Usable energy	4.96kWh	9.92kWh	14.88kWh	19.84kWh	24.80kWh	29.76kWh	34.72kWh
Voltage	51.2V						
Max. charging voltage	57.6V						
Nominal charging current	50A	100A	150A	160A	160A	160A	160A
Discharging cut-off voltage	44.8V						
Max. Battery efficiency	95%						
Max. recommended DOD	95%						
Communication	RS485/CAN						
IP rating	IP55						
Operating temperature	-10 ~ 50℃						
Altitude	≤5,000m						
Humidity	5% ~ 95%						
Warranty	10 years (5 free warranty + 5 paid warranty)						
Dimension	720*420*458mm	720*420*608mm	720*420*758mm	720*420*908mm	720*420*1058mm	720*420*1208mm	720*420*1358mm
Net weight	63kg	113kg	163kg	213kg	263kg	313kg	363kg
Certificates	CE, IEC62619, IEC61000, IEC62040, IEC63056, UN38.3, MSDS						

Model	PowerCool-LFP-HV					
Battery type	LFP					
Number of connection	2pcs	3pcs	4pcs	5pcs	6pcs	7pcs
Total energy	10.44kWh	15.66kWh	20.88kWh	26.11kWh	31.33kWh	36.55kWh
Usable energy	9.92kWh	14.88kWh	19.84kWh	24.80kWh	29.76kWh	34.72kWh
Voltage	102.4V	153.6V	204.8V	256V	307.2V	358.4V
Nominal charging voltage	115.2V	172.8V	230.4V	288V	345.6V	403.2V
Max. charging/discharging current	50A					
Discharge cut-off voltage	89.6V	134.4V	179.2V	224V	268.8V	313.6V
Max. Battery efficiency	95%					
Maximum recommended DOD	95%					
Communication	RS485/CAN					
IP rating	IP55					
Operating temperature	-10 ~ 50℃					
Altitude	≤5,000m					
Humidity	5% ~ 95%					
Warranty	10 years (5 free warranty + 5 paid warranty)					
Dimension	720*420*608mm	720*420*758mm	720*420*908mm	720*420*1058mm	720*420*1208mm	720*420*1358mm
Net weight	113kg	163kg	213kg	263kg	313kg	363kg
Certificates	CE, IEC62619, IEC61000, IEC62040, IEC63056, UN38.3, MSDS					

Wall-mounted Residential ESS

Features & Advantages

- Wall-mounted or floor-standing
- Safe LFP cells and smart BMS
- Scalable up to 30kWh
- 6,000 cycles at 90% DOD
  15+ years design life

Technical Specifications

Model	PowerCool-LFP-WLV5000
Total Energy*	5.12kWh
Usable Energy(DC)*	4.86kWh
Voltage	44.8~57.6Vdc
Nominal Voltage	51.2Vdc
Rated Capacity	100Ah
Max.Charge Voltage	57.6Vdc
Nominal Discharging Current	80A(1P) /160A(2P) / 160A(3P) / 160A(4P) / 160A(5P) / 160A(6P)
Nominal Charging Current	50A(1P) /100A(2P) / 150A(3P) / 160A(4P) / 160A(5P) / 160A(6P)
Weight	47kg
Dimension(mm)(H*L*W)	640*420*161.5mm
Max.recommendde DOD	95%
Operating Condition	Indoor
Operating Temperature Charge	0~55℃
Operating Temperature Discharge	0~55℃
Standard Ambient Temperature Range	0~40℃
Storage Temperature Range	> 1 month 0~35℃ / ≤1 month -20~45℃
Humidity	5% ~ 95%(RH)(No Condensation)
Over Voltage Category	II
Cooling Type	Natural cooling
Case Material	Metal
Installation	Wall-mounted or floor-standing
IP Rating	IP 20
Protective Class	I
Max.Connection Number	6P
Communication	CAN/ RS485
Battery Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature
Certificates	CE,IEC62619,IEC61000,IEC62040,IEC63056,UN38.3,MSDS
Warranty	10 years (5 free warranty + 5 paid warranty)

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions from PowerCool-LFP-WLV 0.2C CC-CV

Vertical Residential All-in-One ESS (LV)

Features & Advantages

- **All-in-One Design**
  - · AIO modular system that includes inverter, charger controller, UPS-level switching system and battery modules
- **High Safety**
  - · IP65 outdoor design
  - · 3-level (cell-pack-system) protection
  - · AFCI standard
  - · Overload capacity 150% for 10mins
- **Easy Installation & Capacity Expansion**
  - · Plug & Play modular design
  - · Save 50% installation time
  - · Save 50% installation space
  - · Scalable up to 30.72kWh
- **Easy Management**
  - · Dynamic SOC calibration
  - · RSD Ready & VPP Ready
  - · Support remote monitoring through mobile phone APP & global Cloud platform available

Technical Specifications

	Ares 3KAL	Ares 3.6KAL	Ares 4KAL	Ares 4.6KAL	Ares 5KAL	Ares 5.5KAL	Ares 6KAL
PV Input							
Max. Input Power	4.5 kW	5.4 kW	6.0 kW	6.9 kW	7.5 kW	8.3 kW	9.0 kW
Max. PV Voltage				550 V			
MPPT Range				80-500 V			
Full MPPT Range	90 - 500 V	110 - 500 V	120 - 500 V	130 - 500 V	150 - 500 V	160 - 500 V	170 - 500 V
Normal Voltage				360 V			
Startup Voltage				100 V			
Max. Input Current				18.5 x 2 A			
Max. Short Current				26 x 2 A			
No. of MPP Tracker / No. of PV String				2/2			
Battery Port							
Max. Charge/Discharge Power	3.0 kW	3.6 kW	4.0 kW	4.6 kW	5.0 kW	5.5 kW	6.0 kW
Max. Charge/Discharge Current		80 A			120 A		
Battery Normal Voltage				51.2 V			
Battery Voltage Range				40 - 60 V			
Battery Type				Li-ion / Lead-acid etc.			
AC Grid							
Max Coninuous Current	14.0 A	17.0 A	19.0 A	22.0 A	23.0A	26.0 A	28.0 A
Max Coninuous Power	3.0 kVA	3.6 kVA	4.0 kVA	4.6 kVA	5.0 kVA	5.5 kVA	6.0 kVA
Nominal Grid Current	13.7 / 13.1 A	16.4 / 15.7 A	18.2 / 17.4 A	21.0 / 20.0 A	22.8 / 21.8 A	25.0 / 24.0 A	27.3 / 26.1 A
Nominal Grid Voltage				198 to 242 @ 220 / 207 to 253 @ 230 V			
Nominal Grid Frequency				50 / 60 Hz			
Power Factor				0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)			
Current THD				< 3 %			
AC Load Output(Back-up)							
Max Coninuous Current	14.0 A	17.0 A	19.0 A	22.0 A	23.0 A	26.0 A	28.0 A
Max Coninuous Power	3.0 kVA	3.6 kVA	4.0kVA	4.6 kVA	5.0 kVA	5.5 kVA	6.0 kVA
Max Peak Current (10min)	20.5 / 19.6A	24.6 / 23.5A	27.3 / 26.1A	31.4 / 30A	34.1 / 32.7A	37.8 / 36.1A	41.0 / 39.2A
Max Peak Power (10min)	4.5 kVA	5.4 kVA	6.0 kVA	6.9 kVA	7.5 kVA	8.3 kVA	9.0 kVA
Nominal AC Voltage L-N				220 / 230 V			
Nominal AC Frequency				50 / 60 Hz			
Switching Time				< 10 ms			
Voltage THD				< 3 c			
Efficiency							
CEC Efficiency		97.0 %				98.1 %	
Max. Efficiency		97.6 %				98.1 %	
PV to Bat. Efficiency		98.1 %				98.1 %	
Bat. between AC Efficiency		96.8 %				96.8 %	
Protection							
PV Reverse Polarity Protection				Yes			
Over Current/Voltage Protection				Yes			
Anti-Islanding Protection				Yes			
AC Short Circuit Protection				Yes			
Residual Current Detection				Yes			
Ground Fault Monitoring				Yes			
Insulation Resister Detection				Yes			
PV Arc Detection				Yes			
Enclosure Protect Level				IP65 / NEMA4X			

		Ares 3KAL	Ares 3.6KAL	Ares 4KAL	Ares 4.6KAL	Ares 5KAL	Ares 5.5KAL	Ares 6KAL
General Data								
Dimensions (W*H*D)					600 x 430 x 210 mm			
Weight					25 kg			
Topology					Transformerless			
Cooling					Intelligent Fan			
Relatively Humidity					0-100 %			
Operating Temperature Range					-25 to 60 ℃			
Operating Altitude					≤2000˚ m			
Noise Emission					<25 dB			
Standby Consumption					<10 W			
Mounting					Wall Bracket			
Communication with RSD					SUNSPEC			
Display & Communication Interfaces					LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G			
Certification & Approvals					NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2			
EMC					EN61000-6-2, EN61000-6-3			

Battery Cell Technology		PowerCool-LFP-VLV					
Number of Pack		1pcs	2pcs	3pcs	4pcs	5pcs	6pcs
Total Energy*		5.12 kWh	10.24 kWh	15.36 kWh	20.48 kWh	25.6 kWh	30.72 kWh
Usable Energy*		4.86 kWh	9.72 kWh	14.59 kWh	19.45 kWh	24.32 kWh	29.18 kWh
Voltage Range		44.8 ~ 57.6 Vd.c					
Nominal Voltage		51.2 V					
Max. Charge Voltage		57.6 V					
Max. Continuous Charging Current		50 A	100 A	150 A	160 A	160 A	160 A
Max. Continuous Discharge Current		50 A	100 A	150 A	160 A	160 A	160 A
DOD		95 %					
Communication		CAN					
Dimension(L*W*H)		(600±2) * (215±2) * (360±3) mm	(600±2) * (215±2) * (680±5) mm	(600±2) * (215±2) * (1000±7) mm	(600±2) * (215±2) * (1320±9) mm	(600±2) * (215±2) * (1640±9) mm	(600±2) * (215±2) * (1960±9) mm
Net Weight		(50±2) kg	(97±4) kg	(144±6) kg	(191±6) kg	(238±6) kg	(285±6) kg
Operating Condition		Indoor or outdoor					
Operating Temperature	Charging	0~55 ℃					
	Discharging	0~55 ℃					
Humidity		15% ~ 85% (No Condensation)					
Cooling Type		Natural					
IP Rating		IP66					
Installation Method		Stacked installation					
Warranty		10 years (5 free warranty + 5 paid warranty)					
Configuration		IEC62619,IEC63056,IEC61000-6-1,IEC61000-6-3,IEC62477-1,IEC60730,IEC62040,UN38.3,MSDS					

Testing conditions based on temperature 25℃ at the beginning of life.

*Total Energy/Usable Energy measured under specific conditions from PowerCool-LFP 0.2C CC-CV

Vertical Residential All-in-One ESS (HV)

Features & Advantages

- **All-in-One Design**
  · AIO modular system that includes inverter, charger controller, UPS-level switching system and battery modules

- **High Safety**
  · IP66 outdoor design
  · 3-level (cell-pack-system) protection
  · AFCI standard

- **Easy Installation & Capacity Expansion**
  · Plug & Play modular design
  · Save 50% installation time
  · Save 50% installation space
  · Scalable up to 23.04kWh

- **Easy Management**
  · Dynamic SOC calibration
  · RSD Ready & VPP Ready
  · Support remote monitoring through mobile phone APP & global cloud platform available

Technical Data	Ares 3KAH	Ares 4KAH	Ares 5KAH	Ares 6KAH	Ares 8KAH	Ares 10KAH	Ares 12KAH	Ares 15KAH
PV Input								
Max. DC Input Power (kW)	5	6	7.5	9	12	15	18	22.5
Max. PV Voltage (V)	1000							
Rated DC Input Voltage (V)	620							
DC Input Volage Range (V)	150-1000							
MPPT Voltage Range (V)	150-850							
Full MPPT Range (V)		200-850		250-850	300-850		500-850	
Start-up Voltage (V)	160							
Max. DC Input Current (A)	20x2							
Max. Short Curent (A)	30x2							
No. of MPPT Tracker/Strings	2/2							
Battery Port								
Battery Nominal Voltage (V)	150	200	200	250	300	350	450	500
Battery Votage Range (V)	80-600							
Max. Charge/Discharge Current (A)	30							
Max. Charge/Discharge Power (kW)	3	4	5	6	8	10	12	15
Charging Curve	3 Stages							
Compatible Battery Type	Li-ion / Sodium-ion battery							
AC Grid								
Nominal AC Output Power (kW)	3	4	5	6	8	10	12	15
Max. AC Input/Output Power (kVA)	4.5/3.3	6/4.4	7.5/5.5	9/6.6	12/8.8	15/11	18/13.2	22.5 / 16.5
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17	21.5	27
Nominal AC Voltage (V)	230/400							
Nominal AC Frenquency (Hz)	50/60							
Power Factor	1 (-0.8-0.8) adjustable							
Current THD (%)	< 3%							
AC Load Output(Back-up)								
Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000	12000	15000
Nominal Output Voltage (V)	230/400							
Nominal Output Frequency (Hz)	50/60							
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5	17.4	21.8
Peak Output Power	3300VA,60s	4400VA,60s	5500VA,60s	6600VA,60s	8800VA,60s	11000VA,60s	13200VA,60s	16500VA,60s
THDV (with linear load)	<3%							
Switching Time (ms)	<10							
Efficiency								
Europe Efficiency	97.50%							
Max. Efficiency		98.00%				98.20%		98.30%
Battery Charge/Discharge Efficiency	98.00%							
Protection								
Reverse Polarity Protection	Yes							
Over Current / Voltage Protection	Yes							
Anti-islanding Protection	Yes							
AC Short-ciruit Protection	Yes							
Leakage Curent Detection	Yes							
Ground Fault Monitoring	Yes							
Grid Monitoring	Yes							
Enclosure Protect level	IP66							
General Data								
Dimensions ((L*W*H),mm)	600 * 432 * 210							
Weight (kg)	25							
Topology	Transformerless							
Cooling Concept	Natural Convection						Intelligent Fan	
Relatively Humidity	0-100%							
Operating Temperature Range (℃)	-25 to 60℃							
Operating Altitude (m)	<4000							
Noise Emission (dB)	<40							
Standby Consumption (W)	<5							
Display & Communication Lnterfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G							
Certifcation & Approvals	NRS097,G98/G99,EN50549-1,C10/C11,AS4777.2,VDE-AR-N4105,VDE0126, IEC62109-1, EC62109-2							
EMC	EN61000-6-2,EN61000-6-3							

Technical Specifications

Parameters of system

Type/model	PowerCool-LFP-VHV-9	PowerCool-LFP-VHV-13	PowerCool-LFP-VHV-18	PowerCool-LFP-VHV-23
Number of Pack（pcs）	2	3	4	5
Total Energy（kWh）	9.21	13.82	18.43	23.04
Usable Energy* (kWh)	8.74	13.12	17.50	21.88
Voltage Range (Vd.c)	112~144	168~216	224~288	280~360
Nominal Voltage (V)	128	192	256	320
Charging Voltage Declared by Manufacturer (V)	144	216	288	360
Nominal Charging Current (A)	30			
Nominal Discharge Current (A)	30			
DOD (%)	95			
Communication	CAN/RS485			
Dimension ((L*W*H),mm)	(600±2)* (210±2)* (610±3)	(600±2)* (210±2)* (895±5)	(600±2)* (210±2)* (1180±7)	(600±2)* (210±2)* (1465±9)
Net Weight (kg)	(105±2)	(149±4)	(193±6)	(237±6)
Operating Condition	Indoor or outdoor			
Storage Temperature Range	> 1 month 0~35℃; ≤1 month -20~45℃			
Operating Temperature Charging	0~55 ℃			
Operating Temperature Discharging	0~55 ℃			
Humidity	15% ~ 85%RH(No condensation)			
Cooling Type	Natural			
IP Rating of Enclosure	IP66			
Installation Method	Stacked installation			
Warranty	10 years (5 free warranty + 5 paid warranty)			

*Testing conditions based on temperature 25℃ at the beginning of life. Total Energy/Usable Energy are measured with a standard test method: 0.2C Charge and Discharge. As per the characteristics of lithium batteries, such parameters as the charge/ discharge current and efficiency listed above are subject to change. The final right of interpretation is reserved by Jiangsu SolarEast Energy Storage Technology Co., Ltd.

Pack

Battery Module Type	PowerCool-LFP-VLV
Total Energy	4.60 kWh
Usable Energy*	4.37 kWh
Voltage Range	56~72 Vd.c
Nominal Voltage	64 V
Charging Voltage Declared by Manufacturer	72 V
Upper Limit Charging Voltage	73 V
Discharge Cut-off Voltage	56 V
Lower Limit Discharging Voltage	52 V
Max.Continuous Charging Current	30 A
Max.Continuous Discharge Current	30 A
DOD	95%
Dimension ((L*W*H),mm)	(600±2) * (210±2) * (285±2)
Net Weight	(44±2) kg
Operating Condition	Indoor or outdoor
Operating Temperature Charging	0~55 ℃
Operating Temperature Discharging	0~55 ℃
Humidity	15% ~ 85%RH(No Condensation)
Configuration	(10S)2S
Warranty	10 years

Rack-mounted Residential ESS

Features & Advantages

Safety
LFP Battery, Intelligent BMS and protective hardware providing complete protection

Accuracy
Dynamic SOC calibration

Compatibility
Suitable for most mainstream inverters

Easy Installation
Support parallel connection number up to 10

Durability
6,000 cycles at 95% DOD,15+ years design life

Certificates
CE/IEC62619/IEC63056/IEC62040 /UN38.3/MSDS

Technical Specifications

Model	PowerCool-LFP-5000
Battery Type	LFP
Total Energy	5.22kWh
Usable Energy	4.96kWh
Voltage	51.2V
Cell capacity	102Ah
Max. parallel connection number	10P
Max. charging voltage	57.6V
Nominal charging current	50A(single) /100A(multiple in parallel)
Nominal discharging current	80A(single) /100A(multiple in parallel)
Discharge cut-off voltage	44.8V
Battery efficiency	95%
Max. recommended DOD	95%
Communication	RS485/CAN
IP rating	IP20
Operating temperature	0 ~ 50℃
Cooling Type	Natural cooling
Altitude	≤5,000m
Humidity	5% ~ 95%(No condensed water)
Battery Protection	Over-current/Over-voltage/Short-circuit/Under-voltage/Over temperature
Warranty	10 years (5 free warranty + 5 paid warranty)
Dimension	560*390*138mm
Net weight	45kg
Case Material	Metal
Color	Black
Installation	Ground Installation

Testing conditions based on temperature 25℃ at the beginning of life.

*Total Energy/Usable Energy measured under specific conditions from PowerCool-LFP 0.2C CC-CV

Movable Residential ESS

Features & Advantages

- Large Capacity
- Reliable Operation
- Built-in BMS Protection
- Optimal Management
- High Quality 360° Wheels
- Reliable Backup Power

Technical Specifications

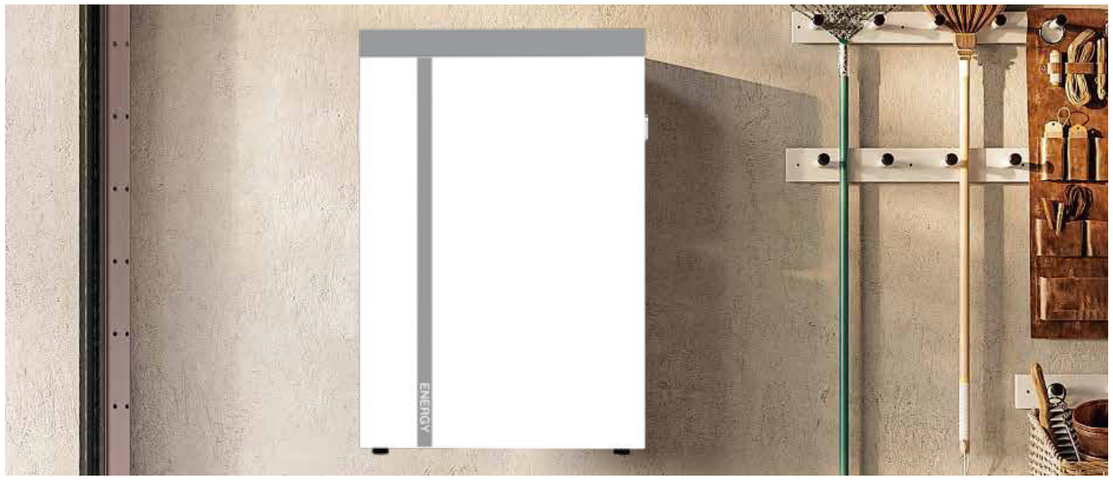
		PowerCool-WLL016A1
Total Energy*		16.07kWh
Usable Energy(DC)*		15.27kWh
Voltage		44.8~57.6Vdc
Nominal Voltage		51.2Vdc
Rated Capacity		314Ah
Max. Charge Voltage		57.6Vdc
Nominal Discharging Current		157A
Nominal Charging Current		157A
Weight		135kg
Dimension(mm)(H*L *W)		800*500*250mm
Max.recommended DOD		95%
Operating Condition		Indoor
Operating Temperature	Charge	0~55℃
	Discharge	0~55℃
Standard Ambient Temperature Range		0~40℃
Storage Temperature Range		0 ℃ to 40 ℃ @60+25% Relative Humidity
Humidity		5% ~ 95%(RH)(No Condensation)
Over Voltage Category		II
Cooling Type		Natural cooling
Case Material		Metal
Installation		floor-standing
IP Rating		IP 20
Protective Class		I
Max. Connection Number		6P
Communication		CAN / RS485
Battery Protection		Over-current/Over-voltage/Short circuit/ Under-voltage/Over-temperature
Certificates		CE,UN38.3,MSDS
Warranty		5 years

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions from PowerCool-WLL016A10.2C CC-CV

Wall-mounted Residential ESS

Features & Advantages

- Large Capacity
- Reliable Operation
- Built-in BMS Protection
- Optimal Management
- Reliable Backup Power



Technical Specifications

		PowerCool-WLL005B1
Total Energy*		5.12kWh
Usable Energy(DC)*		4.86kWh
Voltage		44.8~57.6Vdc
Nominal Voltage		51.2Vdc
Rated Capacity		100Ah
Max. Charge Voltage		57.6Vdc
Nominal Discharging Current		80A(1P) /160A(2P) / 160A(3P) / 160A(4P) / 160A(5P) / 160A(6P)
Nominal Charging Current		50A(1P) /100A(2P) / 150A(3P) / 160A(4P) / 160A(5P) / 160A(6P)
Weight		47kg
Dimension(mm)(H*L *W)		620*420*135mm
Max.recommended DOD		95%
Operating Condition		Indoor
Operating Temperature	Charge	0~55℃
	Discharge	0~55℃
Standard Ambient Temperature Range		0~40℃
Storage Temperature Range		0 ℃ to 40 ℃ @60+25% Relative Humidity
Humidity		5% ~ 95%(RH)(No Condensation)
Over Voltage Category		II
Cooling Type		Natural cooling
Case Material		Metal
Installation		Wall-mouted or floor-standing
IP Rating		IP 20
Protective Class		I
Max. Connection Number		6P
Communication		CAN / RS485
Battery Protection		Over-current/Over-voltage/Short circuit/ Under-voltage/Over-temperature
Certificates		CE,UN38.3,MSDS
Warranty		5 years

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions from PowerCool-WLL005B1 0.2C CC-CV

Liquid-cooling Battery Pack

1P48S/1P52S battery pack

Features & Advantages

High Security

Use lithium iron phosphate (LiFePO4) cells with high thermal stability.
Thermal insulation material between battery cells, preventing heat difusion at temperatures up to 1000℃.
Fine-tuned fire safety design with internal fire suppression.
IP67 high safety protection level.

High Integration

Modular design to match container and cabinet energy storage.
Modular high energy density design for smaller size and lighter weight.

Long Lifespan

Equipped with advanced batteries of first-line battery suppliers, the longest cycle life of the battery cell is 8000 Cycle.
Optimized flow channel design through thermal simulation ensures a temperature difference of less than 3℃ within a single pack, ensuring cell stability and reliability.

The Product can be provided on OEM/ODM basis

Technical Specifications

Model		SE-BP-280L-1P48S	SE-BP-280L-1P52S
Cell type		LFP	
Cell capacity		280Ah	
Group configuration		1P48S	1P52S
Nominal voltage		153.6V	166.4V
Nominal capacity		43.008kWh(@25℃±2)	46.59kWh(@25℃±2)
Efficiency		≥94%	
Max. constant charging/discharging power		0.5P	
Nominal charging/discharging current		140A	
Range of operating voltage		129.6V ~ 172.8V	140.4V~187.2V
Max. range of working temperature	Charging	0℃ ~ 55℃	
	Discharging	-30℃ ~ 55℃	
Max. temperature of national standard full cycle battery cell		35℃	
Max. temperature difference of national standard full cycle battery cell		3℃	
IP rating		IP67	
Environment humanity		< 90%RH（non-condensing）	
Cooling method		Liquid cooling	
Weight		305kg	330kg
Dimension(W*D*H)		790mm×1065mm×245mm	790mm×1154mm×243mm
Fire safety configuration		Aerosol	
Maximum working altitude		2000m	
Cycle Life		8000	

* Specific parameters may vary based on different system configurations.
All efforts are exerted to ensure all the information herein is full and accurate. The Company reserves the right to revise relevant data and parameters from time to time without prior notice.

Liquid-cooling energy storage cabinet

215kWh/233kWh energy storage cabinet

Features & Advantages

High Security

Battery circuit safety management, fast fuse protection.
A multi-level battery protection system ensuring impeccable safety.
Intelligent anti-leakage detection,enhancing system safety.

Long Lifespan

Intelligent liquid cooling ensures higher efficiency and longer battery cycle life.
Modular design with parallel support for easy system expansion.

High Integration

Highly integrated, easy to transport and operation and maintenance.
Fully pre-assembled, eliminating the need for on-site battery module installation.
On-site installation within 8 hours.

Intelligent

Real-time status monitoring and fault recording to achieve fault warning and fault location.
Built-in battery performance monitoring and recording function.

The Product can be provided on OEM/ODM basis

Technical Specifications

Model	SE215L-100K	SE233L-125K	SE241L-125K	SE261L-125K
		AC Side		
AC Rated Power	100kW	125kW	125kW	125kW
Allowable Grid Voltage Range		400V (-15%~10%)		
Allowable Grid Frequency Range		50/60Hz±2.5Hz		
Rated Current	145A	180A	180A	180A
Max. PCS Efficiency		98%		
Way of Connection		3P+N+PE		
		Battery Side		
Cell Specification	LFP 3.2V/280Ah	LFP 3.2V/280Ah	LFP 3.2V/314Ah	LFP 3.2V/314Ah
Battery RACK Configuration	1P240S	1P260S	1P240S	1P260S
System Capacity	215kWh @ 25℃, 0.5P	233kWh @ 25℃, 0.5P	241kWh @ 25℃, 0.5P	261kWh @ 25℃, 0.5P
Voltage Range	648~864V	702~936V	648~864V	702~936V
		System Parameter		
Charge/discharge Ratio		≤0.5P		
Display		Touch screen display (optional)		
Dimension(W*D*H)		1000*1350*2391mm(Incl. lifting lug) 1000*1350*2300mm(Excl. liftinglug)		
Weight	2400kg	2600kg	2450kg	2650kg
Noise		<75dB		
IP rating		IP54 (Pack: IP67)		
System Efficiency		>88%		
Cooling method		Liquid cooling		
Environmental Temperature		-30~55 ℃		
Humidity		≤95%		
Maximum working altitude		2000m		
Fire safety configuration		Aerosol		
Communication Interface		Ethernet/CAN/RS485		
Communication Protocol		MODBUS-TCP		
Compliant with standards		GB/T 34120, GB/T 36276, IEC62477, IEC62619, IEC63056		
Cycle Life		8000		

* Specific parameters may vary based on different system configurations.

Liquid-cooling energy storage cabinet

372kWh/418kWh energy storage cabinet

Features & Advantages

High Security

Battery circuit safety management, fast fuse protection.
A multi-level battery protection system ensuring impeccable safety.
Intelligent anti-leakage detection,enhancing system safety.

Long Lifespan

Intelligent liquid cooling ensures higher efficiency and longer battery cycle life.
Modular design with parallel support for easy system expansion.

High Integration

Highly integrated, easy to transport and operation and maintenance.
Fully pre-assembled, eliminating the need for on-site battery module installation.
On-site installation within 8 hours.

Intelligent

Real-time status monitoring and fault recording to achieve fault warning and fault location.
Built-in battery performance monitoring and recording function.

The Product can be provided on OEM/ODM basis

Technical Specifications

Model	SE372L-186K	SE418L-215K
	AC Side	
AC Rated Power	186kW	215kW
Allowable Grid Voltage Range	400V (-15%~10%)	
Allowable Grid Frequency Range	50/60Hz±2.5Hz	
Rated Current	268A	310A
Max. PCS Efficiency	98%	
Way of Connection	3P+PE	
	Battery Side	
Cell Specification	LFP 3.2V/280Ah	LFP 3.2V/314Ah
Battery RACK Configuration	1P416S	1P416S
System Capacity	372.736kWh @ 25℃，0.5P	417.996kWh @ 25℃，0.5P
Voltage Range	1123.2~1497.6V	
	System Parameter	
Charge/discharge Ratio	≤0.5P	
Display	Touch screen display (optional)	
Dimension(W*D*H)	1400*1400*2400mm	
Weight	3600kg	3700kg
Noise	<75dB	
IP rating	IP54（Pack：IP67）	
System Efficiency	>88%	
Cooling method	Liquid cooling	
Environmental Temperature	-30~55 ℃	
Humidity	≤95%	
Maximum working altitude	2000m	
Fire safety configuration	Aerosol	
Communication Interface	Ethernet/CAN/RS485	
Communication Protocol	MODBUS-RTU	
Compliant with standards	GB/T 34120，GB/T 36276，IEC62477，IEC62619，IEC63056	
Cycle Life	8000	

* Specific parameters may vary based on different system configurations.

Liquid-cooling ESS Container

5MWh ESS Container

Features & Advantages

High Security

Election of lithium iron phosphate cells with high thermal stability.
IP54 protection rating, meeting the needs of outdoor applications.
C4 protection rating, 20-year reliability.
Prevention based fire fighting strategy with independent fire fighting system.

High Integration

Modular design, DC 1500V system.
Electrical and battery separation design, easy maintenance.
Non-walk-in/modular highly integrated design saves space.
Prefabricated compartment installation solution reducing on-site installation cost and commissioning time.

Long Lifespan

Integrated efficient liquid cooling system.
The temperature difference inside the container is <5°C.

The Product can be provided on OEM/ODM basis

Technical Specifications

Technical Data	3.34MWh	5.015MWh
Battery type	3.2V, 314 Ah	
Max. connection number	1P416S*8	1P416S*12
Total energy	3343.97kWh	5015.96kWh
Rated power (0.5P)	1672kW	2500kW
Voltage range (Battery)	1123.2~1497.6V	
System		
Dimension (W*D*H)	6058mm *2438mm*2896mm	
Weight	≤35T	≤50T
IP rating	IP54（Pack IP67）	
Operating temperature	-20~50℃	
Humidity	0-95%RH（no condensation）	
Altitude	≤2000m（Standard）/≤5000m(Optional)	
Cooling method	Liquid cooling/50% ethylene glycol	
Fire safety configuration	Aerosol	
Corrosion resistance	C4	
Communication Interface	CAN/Ethernet	
Certificates	GB/T36276 - 2023	
Cycle Life	8000	

Air-cooling Pack Solutions

Features & Advantages

High Safety

Selection of lithium iron phosphate cells with high thermal stability.
Overall elastic constraint to reduce the impact of cell expansion.

Standardization

Standardization of manufacturing processes to ensure stability and efficiency in production, improving product quality and reducing production costs.

Long Lifespan

Equipped with advanced batteries from top-tier battery suppliers, the cells have a maximum cycle life of up to 8000 cycles.
The design of air channels between cells effectively controls heat accumulation and thermal runaway, ensuring cell stability and reliability.

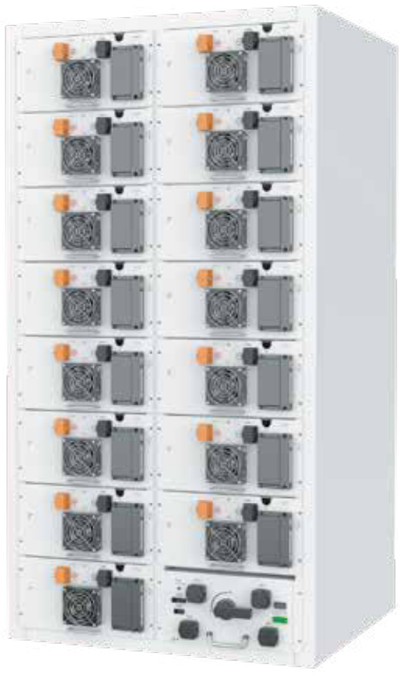
The Product can be provided on OEM/ODM basis

Technical Specifications

		SE-BP-280A-1P16S	SE-BP-280A-1P20S
Cell type		LFP	
Cell capacity		280Ah	
Group configuration		1P16S	1P20S
Nominal voltage		51.2V	64V
Nominal capacity		14.336kWh(@25℃±2)	17.92kWh(@25℃±2)
Efficiency		≥94%	
Max. constant charging/discharging power		0.5P	
Nominal charging/discharging current		140A	
Range of operating voltage		43.2V ~ 57.6V	54V~72V
Max. range of working temperature	Charging	0℃ ~ 55℃	
	Discharging	-30℃ ~ 55℃	
Max. temperature of national standard full cycle battery cell		35℃	
Max. temperature difference of national standard full cycle battery cell		5℃	
IP rating		IP20	
Environment humanity		< 90%RH（non-condensing）	
Cooling method		Air cooling	
Weight		114kg	140kg
Dimension(W*D*H)		483mm×814mm×235mm	483mm×970mm×235mm
Fire safety configuration		Aerosol	
Maximum working altitude		2000m	
Cycle Life		8000	

All efforts are exerted to ensure all the information herein is full and accurate. The Company reserves the right to revise relevant data and parameters from time to time without prior notice.

Air-cooling Pack Solutions



Features & Advantages

Operational Assurance

Two-tier battery safety management system.
Full coverage of critical sampling points, building a comprehensive IoT.
Real-time feedback control; fault diagnosis, real-time warning.
Triple protection, blocking the spread of risk in layers.

Thermal Management System

Advanced thermal management technology, from the cell to the battery module.
Through simulation and actual testing, controlling the temperature difference within the rack is within 8℃.

Flexible Configuration, High Compatibility

Flexible configuration with standardized, modular design; the PACK supports DC1500V platform.

The Product can be provided on OEM/ODM basis

Technical Specifications

Model	SE-BC-280A-1P16S*15	SE-BC-280A-1P20S*12
Cell type	LFP	
Cell capacity	280Ah	
Group configuration	1P16S*15	1P20S*12
Nominal voltage	768V	
Nominal capacity	215kWh(@25℃±2)	
Efficiency	≥94%	
Max. constant charging/discharging power	0.5P	
Nominal charging/discharging current	140A	
Range of operating voltage	648V~864V	
Max. range of working temperature (Charging)	0℃ ~ 55℃	
Max. range of working temperature (Discharging)	-30℃ ~ 55℃	
Max. temperature of national standard full cycle battery cell	35℃	
Max. temperature difference of national standard full cycle battery cell	8℃	
IP rating	IP20	
Environment humanity	< 90%RH（non-condensing）	
Cooling method	Air cooling	
Weight	1950kg	1920kg
Dimension(W*D*H)	1056mm×830mm×2000mm	1056mm×983mm×1740mm
Fire safety configuration	Aerosol	
Maximum working altitude	2000m	
Cycle Life	8000	

Air-cooling Energy Storage Cabinet Solutions

Features & Advantages

Efficient Conversion
High energy density, can support battery transportation.

Smart and Friendly
Real-time status monitoring and fault recording.
Multi-energy complementation of solar, storage, diesel-generator, and grid power, utilizing resources reasonably

Safe and Reliable
Multi-level battery protection system, ensuring impeccable safety.
With grid power supply and backup power supply interface to ensure uninterrupted important loads

Flexible Configuration
With device black start function, voltage support is established in a short time Integrated 2-way MPPT, with multi-way photovoltaic interface

The Product can be provided on OEM/ODM basis

Technical Specifications

Model	SE100A-50K	SE215A-100K
	AC Side	
AC Rated Power	50kW	100kW
Max. apparent power	50kVA	100kVA
Allowable Grid Frequency Range	50Hz	50Hz
Rated Current	72A	145A
Max. PCS Efficiency	98%	
Way of Connection	3P+N+PE	
Off grid conversion time	≤20ms	
Off grid three-phase imbalance	100% unbalanced load capacity	
	DC Side	
Cell Specification	LFP 3.2V/280Ah	
Battery PACK Configuration	1P16S*7	1P16S*15/1P20S*12
System Capacity	100kWh@25℃,0.5P	215kWh@25℃,0.5P
Voltage Range	302.4~403.2V	648~864V
	Battery System	
Charge/discharge Ratio	≤0.5P	
Dimension(W*D*H)	700*1100*2000mm 700*1280*2000mm (with air conditioner)	1600*1100*2300mm 1600*1280*2300mm (with air conditioner)
Weight	1200kg	2400kg
Noise	<75dB	
IP rating	IP54	
System Efficiency	>88%	
Cooling method	Air cooling	
Environmental Temperature	-30~55 ℃	
Humidity	≤95%	
Maximum working altitude	2000m	
Fire safety configuration	Aerosol	
Communication Interface	Ethernet/4G/RS485	
Communication Protocol	MODBUS-TCP	
Compliant with standards	GB/T 34120，GB/T 36276，IEC62477，IEC62619，IEC63056	
Cycle Life	8000	

All efforts are exerted to ensure all the information herein is full and accurate. The Company reserves the right to revise relevant data and parameters from time to time without prior notice.

Mobile Charging Robot | Charging Pile

Over-voltage Protection

Short-circuit Protection

Charging Protection

Over-heating Protection

Technical Specifications

SE-CR-200 Mobile Charging Robot	
Projects	Parameters
Rated Current	250A
Rated Voltage	750V DC
Storage Capacity	209kWh
Charging Power	120kW
Comprehensive Charging Efficiency	≥95%
Overall Vehicle Dimensions	2250mm*1000mm*1800mm
Weight	2300kg
Mecanum Wheel Driving Speed	5-50cm/s
Height of Crossing Speed Bump	50mm
Drive Structure	Servo McNamm wheel+servo motor mechanism
Motion Mode	Forward, backward, 360 ° rotation, side shift, translation
Output Voltage Range	DC 200V-1000V
Output Current Range	0-200A
IP rating	IP54
Operating Temperature	-20℃~70℃
Charging Operation Method	WeChat Mini Program

SE-CS-120 Charging Pile	
Projects	Parameters
Rated Current	220A
Rated Voltage	540V
Maximum Current	250A
Charging Power	120kW
Weight	482kg
Overall Dimensions of the Whole Pile	1000mm*950mm*1850mm

CE UN38.3 IEC61000 IEC62477 IEC62619 IEC63056

This product sheet is as comprehensive and detailed as possible based on existing information.
The company reserves the right to modify data, parameters and other information.

03 HYBRID INVERTER

Single-phase Hybrid Inverter

Features & Advantages

- Support Time-of-use Optimization
- AFCI (Optional) & Rapid Shutdown Ready
- 100% unbalanced output, each phase;
  200% unbalanced output, each phase (Below 10kW)
- Configurable Operation Modes
- Build-in Anti-feed-in Function
- Smart Monitoring & Remote Firmware Upgrade

Technical Specifications

PV Input	Ares 3.6KL	Ares 5KL	Ares 6KL
Max. Input Power	5.4kW	7.5kW	9.0kW
Max. PV Voltage		550V	
MPPT Range		80 - 500V	
Full MPPT Range	110 - 500V	150 - 500V	170 - 500V
Normal Voltage		360V	
Startup Voltage		100V	
Max. Input Current		18.5 x 2A	
Max. Short Current		26 x 2A	
No.of MPP Tracker/No. of PV String		2 / 2	
Battery Port			
Max. Charge/Discharge Power	3.6kw	4.8kw	4.8kw
Max. Charge/Discharge Current		80A	
Battery Normal Voltage		51.2V	
Battery Voltage Range		40 - 60V	
Battery Type		Li-ion / Lead-acid etc.	
AC Grid			
Max Continuous Current	17.0A	23.0A	28.0A
Max Continuous Power	3.6kVA	5.0kVA	6.0kVA
Nominal Grid Current	16.4/15.7A	22.8 / 21.8A	27.3 / 26.1A
Nominal Grid Voltage		198 to 242 @ 220 / 207 to 253 @ 230V	
Nominal Grid Frequency		50 / 60 Hz	
Power Factor		0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)	
Current THD		< 3%	
AC Load Output			
Max Continuous Current	17.0A	23.0A	28.0A
Max Continuous Power	3.6kVA	5.0kVA	6.0kVA
Max Peak Current (10min)	24.6/23.5A	34.1 / 32.7A	41.0 / 39.2A
Max Peak Power(10min)	5.4kVA	7.5kVA	9.0kVA
Nominal AC Current	16.4 / 15.7A	22.8 / 21.8A	27.3 / 26.1A
Nominal AC Voltage L-N		220/230V	
Nominal AC Frequency		50/60Hz	
Switching Time		Seamless s	
Voltage THD		< 3%	
Efficiency			
CEC Efficiency		97.0%	
Max. Efficiency		97.6%	
PV to Bat. Efficiency		98.1%	
Bat. between AC Efficiency		96.8%	
Protection			
PV Reverse Polarity Protection		Yes	
Over Current/Voltage Protection		Yes	
Anti-Islanding Protection		Yes	
AC Short Circuit Protection		Yes	
Residual Current Detection		Yes	
Ground Fault Monitoring		Yes	
Insulation Resister Detection		Yes	
PV Arc Detection		Yes	
Enclosure Protect Level		IP65/NEMA4X	
General Data			
Dimensions		370 x 535 x 192mm	
Weight	18.5kg	20.5kg	
Topology		Transformerless	
Cooling		Intelligent Fan	
Relatively Humidity		0 - 100%	
Operating Temperature Range		-25 to 60℃	
Operating Altitude		< 4000m	
Noise Emission		<25dB	
Standby Consumption		<10W	
Mounting		Wall Bracket	
Communication with RSD		SUNSPEC	
Display & Communication Interfaces		LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G	
Certification & Approvals		NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2	
EMC		EN61000-6-2, EN61000-6-3	

Three-phase Hybrid Inverter

Features & Advantages

- Support Time-of-use Optimization
- Configurable Operation Modes
- AFCI (Optional) & Rapid Shutdown Ready
- Build-in Anti-feed-in Function
- 100% unbalanced output, each phase;
  200% unbalanced output, each phase (Below 10kW)
- Smart Monitoring & Remote Firmware Upgrade

Technical Specifications

PV Input	Ares 8KH3	Ares 12KH3	Ares 15KH3	Ares 17KH3
Max. DC Input Power	12kW	18kW	22.5kW	25.5kW
Max. PV Voltage		1000V		
Rated DC Input Voltage		620V		
DC Input Voltage Range		150-1000V		
MPPT Voltage Range		150-850V		
Full MPPT Range	300-850V	500-850V	500-850V	500-850V
Start-up Voltage		160V		
Max. DC Input Current	20x2A	20x2A	20+32A	32x2A
Max. Short Current	30x2A	30x2A	30+48A	48x2A
No. of MPPT Tracker / Strings	2/2	2/2	2/3	2/4
Battery Port				
Battery Nominal Voltage	300V	450V	500V	400V
Battery Voltage Range	150-800V	150-800V	150-800V	150-800V
Max. Charge/Discharge Current	30A	30A	50A	50A
Max. Charge/Discharge Power	8kW	12kW	15kW	17kW
Charging Curve		3 Stages		
Compatible Battery Type		Li-ion / Lead-acid / Sodium metal chloride battery		
AC Grid				
Nominal AC Output Power	8kW	12kW	15kW	17kW
Max. AC Input/Output Power	12/8.8kVA	18/13.2kVA	22.5/16.5kVA	25.5/18.7kVA
Max. AC Output Current	17A	21.5A	27A	30A
Nominal AC Voltage		230/400V		
Nominal AC Frenquency		50/60Hz		
Power Factor		1（-0.8-0.8）adjustable		
Current THD		<3%		
AC Load Output (Back-up)				
Nominal Output Power	8000VA	12000VA	15000VA	17000VA
Nominal Output Voltage		230/400V		
Nominal Output Frequency		50/60Hz		
Nominal Output Current	11.6A	17.4 A	21.8A	24.7A
Peak Output Power	8800VA, 60s	13200VA, 60s	16500VA, 60s	18700VA, 60s
THDV (with linear load)		<3%		
Switching Time		<10ms		
Efficency				
Europe Efficiency	97.50%	97.50%	97.50%	97.80%
Max. Efficiency	98.20%	98.30%	98.30%	98.30%
Battery Charge/Discharge Efficiency		98.00%		
Protecion				
Reverse Polarity Protection		Yes		
Over Current / Voltage Protection		Yes		
Anti-islanding Protection		Yes		
AC Short-ciruit Protection		Yes		
Leakage Current Detection		Yes		
Ground Fault Monitoring		Yes		
Grid Monitoring		Yes		
Enclosure Protect Level		IP65		
AC/DC surge protection		Type II		
General Data				
Dimensions		558 x 535 x 260 mm		
Weight		29kg		
Topology		Transformerless		
Cooling Concept		Intelligent Fan		
Relatively Humidity		0-100%		
Operating Temperature Range		-25 to 60℃		
Operating Altitude		<4000m		
Noise Emission	<30dB	<40dB	<40dB	<40dB
Standby Consumption		<5W		
Display & Communication Interfaces		LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G		
Certification & Approvals		NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2		
EMC		EN61000-6-2, EN61000-6-3		

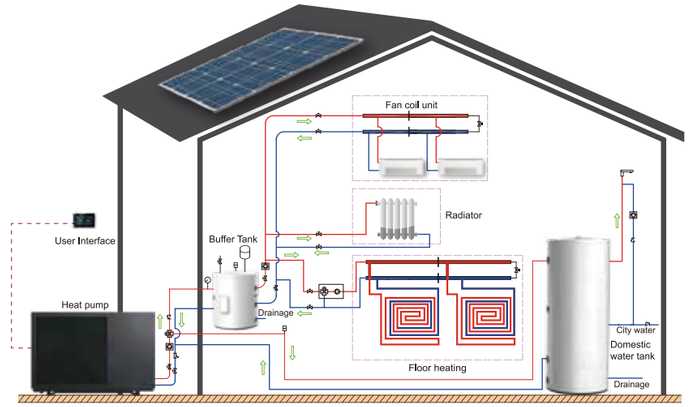
04 AIR SOURCE HEAT PUMP

MONOBLOCK HEAT PUMP

Heating / Cooling / DHW / DC Inverter / Residential Type

Features & Advantages

- R290 refrigerant,low GWP(GWP=3)
- Energy class: A+++
- Stable operation at -25℃
- Outlet water temperature up to 75℃
- Power Detection Function
- SG-READY Function
- 5-Inch TFT True Color Screen
- 5G/2.4G Compatible WIFI Module
- Dual Temperature Zone
- Reserved RS485 Communication Port
- Linkage Control with PV Function



Model			BLN-006TC1	BLN-008TC1	BLN-008TC3	BLN-012TC1	BLN-012TC3	BLN-018TC1	BLN-018TC3
Power supply		V/Ph/Hz	220~240/1/50	220~240/1/50	380~415/3/50	220~240/1/50	380~415/3/50	220~240/1/50	380~415/3/50
Nominal Heating (Max) (A7/6℃,W30/35℃)	Heating capacity	kW	2.92 ~ 9.10	4.10 ~12.10	4.10 ~12.10	4.30 ~ 15.20	4.30 ~ 15.20	7.24 ~ 21.90	7.24 ~ 21.90
	Power input	kW	0.61 ~ 2.11	0.79 ~2.85	0.79 ~2.85	0.87 ~ 3.73	0.87 ~ 3.73	1.50 ~ 5.88	1.50 ~ 5.88
	Current input	A	2.80 ~ 9.25	3.45~13.04	1.62~4.57	4.02 ~ 16.38	1.78 ~ 6.04	6.86 ~ 30.25	2.82 ~ 9.16
	COP	W/W	4.31 ~ 5.66	4.24 ~ 5.57	4.24 ~ 5.57	4.07 ~ 5.57	4.07 ~ 5.57	3.82 ~ 5.59	3.82 ~ 5.59
Nominal Heating (Max) (A7/6℃,W47/55℃)	Heating capacity	kW	2.99~8.16	4.05~12.15	4.05~12.15	4.25 ~ 14.55	4.25 ~ 14.55	6.36 ~ 19.45	6.36 ~ 19.45
	Power input	kW	1.03~2.92	1.38~4.06	1.38~4.06	1.45 ~ 4.28	1.45 ~ 4.28	2.15 ~ 6.85	2.15 ~ 6.85
	Current input	A	4.57~12.79	5.73~17.70	2.70~6.43	6.71 ~ 18.80	2.84 ~ 6.78	9.84 ~ 30.12	3.71 ~ 10.60
	COP	W/W	2.79 ~ 3.46	2.99 ~ 3.45	2.99~ 3.45	2.83 ~ 3.45	2.83 ~ 3.45	2.84 ~ 3.57	2.84 ~ 3.57
Nominal Cooling (Max) (A35/24℃,W12/7℃)	Cooling capacity	kW	1.38~5.70	3.65~8.59	3.65~8.59	3.65 ~ 11.04	3.65 ~ 11.04	4.55 ~ 17.20	4.55 ~ 17.20
	Power input	kW	0.67~2.44	1.12~3.31	1.12~3.31	1.12~3.97	1.12 ~ 3.97	1.85 ~ 7.31	1.85 ~ 7.31
	Current input	A	3.06~10.27	5.18~14.47	1.97~5.25	5.18~17.44	1.97 ~ 6.30	8.47 ~ 32.1	2.99 ~ 11.26
ERP level (outlet water temp. at 35℃)		/	A+++	A+++	A+++	A+++	A+++	A+++	A+++
Max. input power		kW	3.5	5.40	5.85	5.40	5.85	7.5	10.5
Max. input current		A	15.0	25.0	10.0	25.0	10.0	35.0	17.0
Refrigerant Type / Charge / GWP		... / kg	R290 / 0.55 / 3	R290 / 1.05 / 3	R290 / 1.05 /3	R290 / 1.05 / 3	R290 / 1.05 /3	R290 / 1.4 / 3	R290 / 1.4 / 3
Rated water flow		m^3/h	1.00	1.4	1.4	2.06	2.06	3.1	3.1
Fan quantity		/	1	1	1	1	1	2	2
Fan motor type		/	DC inverter						
Compressor		/	DC inverter						
Circulating pump		/	Inverter type / Built-in						
IP class		/	IPX4						
Sound pressure at 1m distance		dB(A)	46	43	43	53	54	56	56
Max outlet water temperature		℃	75	75	75	75	75	75	75
Water piping connections		/	G1	G1	G1	G1	G1	G1 - 1 / 4	G1 - 1 / 4
Water Pressure drop		kPa	20	20	20	20	20	55	55
Operating temperature range (heating mode)		℃	-25~45						
Operating temperature range (cooling mode)		℃	16~45						
Unpacked dimensions (L*D*H)		mm	1187*418*805	1287*448*904	1287*448*904	1287*448*904	1287*448*904	1187*488*1456	1187*488*1456
Packed dimensions (L*D*H)		mm	1217*463*920	1317*493*1020	1317*493*1020	1317*493*1020	1317*493*1020	1217*538*1570	1217*538*1570
UnPacked weight		kg	110	134	134	134	134	195	195
Packed weight		kg	122	146	146	146	146	208	208

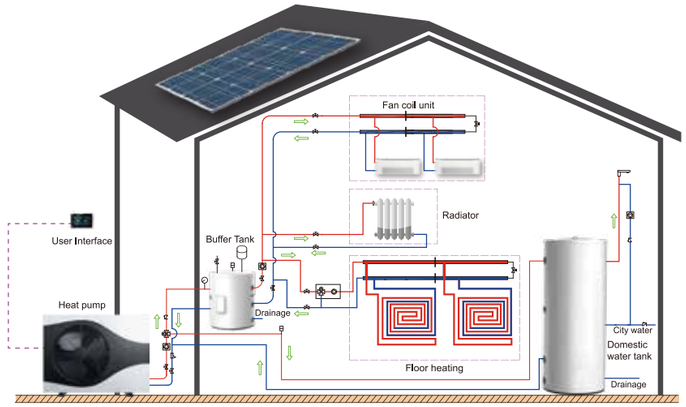
* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

MONOBLOCK HEAT PUMP

Heating / Cooling / DHW / DC Inverter / Residential Type

Features & Advantages

- R32 environmental refrigerant
- Energy class: A+++
- Full DC inverter Panasonic compressor and fan motor
- -25℃ inverter EVI
- Power Detection Function
- SG-READY Function
- 5-Inch TFT True Color Screen
- 5G/2.4G Compatible WIFI Module
- Dual Temperature Zone
- Reserved RS485 Communication Port
- Linkage Control with PV Function
- Outlet water temperature up to 60℃



Model			BLN-006TB1	BLN-010TB1	BLN-010TB3	BLN-014TB1	BLN-014TB3	BLN-018TB1	BLN-018TB3	BLN-024TB3
Power supply		V/Ph/Hz	220~240/1/50	220~240/1/50	380~415/3/50	220~240/1/50	380~415/3/50	220~240/1/50	380~415/3/50	380~415/3/50
Nominal Heating (Max) (A7/6℃,W30/35℃)	Heating Capacity	kW	2.50 ~ 8.30	4.20~12.20	4.20 ~ 12.20	5.30 ~ 16.50	5.30~16.60	6.20~20.50	6.20 ~ 20.50	6.50~26.10
	Power Input	kW	0.57 ~ 1.92	0.86 ~ 2.88	0.86 ~ 2.88	1.15 ~ 4.15	1.15 ~ 4.15	1.36 ~ 5.28	1.36 ~ 5.28	1.78 ~ 6.45
	Current Input	A	2.53 ~ 8.52	3.82 ~ 12.77	1.46 ~ 4.89	5.10 ~ 18.41	1.86 ~ 6.70	6.10 ~ 23.67	2.31 ~ 8.96	2.87 ~ 10.35
	COP	W/W	4.32 ~ 5.86	4.23 ~ 5.39	4.23 ~ 5.39	3.97 ~ 5.43	3.97 ~ 5.43	3.88 ~ 5.21	3.88 ~ 5.21	4.04 ~ 5.43
Nominal Heating (Max) (A7/6℃,W47/55℃)	Heating Capacity	kW	2.30 ~ 7.62	3.85 ~ 11.20	3.85 ~ 11.20	4.90 ~ 15.10	4.90 ~ 15.10	6.30 ~ 19.90	6.30 ~ 19.90	6.90 ~ 26.10
	Power Input	kW	0.75 ~ 2.61	1.13 ~ 3.75	1.13 ~ 3.75	1.65 ~ 5.25	1.65 ~ 5.25	1.65 ~ 6.82	1.65 ~ 6.82	1.95 ~ 8.55
	Current Input	A	3.32 ~ 11.58	5.01 ~ 16.6	1.92 ~ 6.37	7.32 ~ 23.30	1.67 ~ 8.47	7.40 ~ 30.56	2.80 ~ 11.58	3.15 ~ 13.80
	COP	W/W	2.92 ~ 3.33	2.99 ~ 3.46	2.99 ~ 3.46	2.87 ~ 3.38	2.87 ~ 3.38	2.91 ~ 3.34	2.91 ~ 3.34	3.05 ~ 3.42
Nominal Cooling (Max) (A35/24℃,W12/7℃)	Cooling Capacity	kW	1.80 ~ 7.10	2.60 ~ 10.30	2.60 ~ 10.30	4.50 ~ 13.50	4.50 ~ 13.50	5.50 ~ 17.50	5.50 ~ 17.50	5.20 ~ 21.30
	Power Input	kW	0.61 ~ 2.43	0.91 ~ 3.65	0.91 ~ 3.65	1.45 ~ 4.85	1.45 ~ 4.85	1.65 ~ 6.25	1.65 ~ 6.25	1.95 ~ 8.20
	Current Input	A	2.71 ~ 10.78	4.03 ~ 16.19	1.55 ~ 6.20	6.43 ~ 21.52	2.34 ~ 7.82	7.40 ~ 28.02	2.80 ~ 10.61	3.15 ~ 13.23
	EER	W/W	3.04	3	3.00	2.87	2.87	2.96	2.96	2.92
ERP Level (Outlet water temp. at 35℃)		/	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
ERP Level (Outlet water temp. at 55℃)		/	A++	A++	A++	A++	A++	A++	A++	A++
Rated input power		kW	2.71	3.83	3.83	6.20	6.20	7.50	7.50	10.00
Rated input current		A	12	17	6.5	27.50	10.50	35.00	13.00	17.00
Refrigerant Type / Charge / GWP		... / kg	R32/1.25/675	R32/1.8/675	R32/1.8/675	R32/2.8/675	R32/2.8/675	R32/3.5/675	R32/3.5/675	R32/3.5/675
Rated water flow		m^3/h	1.1	1.75	1.75	2.52	2.52	3.20	3.20	4.12
Fan quantity		/	1	1	1	1	1	2	2	2
Fan motor type		/	DC inverter							
Compressor		/	Panasonic / DC inverter / Rotary / EVI							
Circulating pump		/	Inverter type / Built-in							
IP Class		/	IPX4							
Sound pressure at 1m distance		dB(A)	49	52	52	53	54	56	55	58
Max outlet water temperature		℃	60	60	60	60	60	60	60	60
Water piping connections		inch	G1	G1	G1	G1-1/4	G1-1/4	G1-1/2	G1-1/2	G1-1/2
Pressure drop at rating water flow		kPa	25	27	27	30	30	32	32	35
Operating temperature range(Heating mode)		℃	-25~45							
Operating temperature range(Cooing mode)		℃	16~45							
Unpacked Dimensions (L*D*H)		mm	1100*445*850	1100*445*850	1100*445*850	1110*480*850	1110*480*850	1110*445*1450	1110*445*1450	1110*445*1450
Packed Dimensions (L*D*H)		mm	1160*530*1010	1160*530*1010	1160*530*1010	1160*565*1010	1160*565*1010	1170*530*1610	1170*530*1610	1170*530*1610
UnPacked Weight		kg	102	107	107	124	124	151	151	160
Packed Weight		kg	114	119	119	136	136	168	168	177

* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

All-in-One Heat Pump Water Heater

Top Inlet/Outlet

Features & Advantages

- R290 / R134a refrigerant,environmental friendly
- Microchannel heat exchanger
- WIFI smart control
- Higher water temperature output up to 75℃

Technical Specifications

YT-200|300 TA1|2 YT-200|250 TD1|2 YT-200|300 TB1|2

R290

Model	YT-200TA2	YT-300TA2	YT-200TB2	YT-300TB2	YT-200TD2	YT-250TD2
Power Supply			220~240V/1/50Hz			
Rated Heating Capacity（kW)	2.8	2.8	2.8	2.8	2.8	2.8
Refrigerant			R290			
Tapping Cycle	L	XL	L	XL	L	XL
Energy Efficient Class	A+	A+	A+	A+	A+	A+
Energy Efficient ηwh (%)	145.7	147.6	145.7	147.6	145.7	147.6
**COP (EN16147)	3.677	3.691	3.677	3.691	3.677	3.691
Tank Capacity (L)	200	300	200	300	200	250
Air Flow (m^3/h)			450			
Air Discharge			Vertical			
Air Duct Diameter (mm)			ϕ150			
Auxiliary electric heater(kW)			2			
Default Water Temperature(℃)			60			
Working Temperature Range(℃)			-7℃-43			
Unpacked Dimension (mm)	Φ620*1650	Φ620*2050	Φ620*1650	Φ620*2050	Φ620*1650	Φ620*2050
Packed Dimension (L*W*H)(mm)	700*700*1755	700*700*2155	700*700*1755	700*700*2155	700*700*1755	700*700*2155
Net Weight(kg)	95	115	98	117	100	119
Gross Weight(kg)	113	135	116	137	118	139
Noise（dB(A))			48			

R134a

Model	YT-200TA1	YT-300TA1	YT-200TB1	YT-300TB1	YT-200TD1	YT-250TD1
Power Supply			220~240V/1/50Hz			
Rated Heating Capacity（kW)	2.4	2.4	2.4	2.4	2.4	2.4
Refrigerant			R134a			
Tapping Cycle	L	XL	L	XL	L	XL
Energy Efficient Class	A+	A+	A+	A+	A+	A+
Energy Efficient ηwh (%)	148.9	142.0	148.9	142.0	148.9	142.0
**COP (EN16147)	3.48	3.52	3.48	3.52	3.48	3.52
Tank Capacity (L)	200	300	200	300	200	250
Air Flow (m^3/h)			450			
Air Discharge			Vertical			
Air Duct Diameter (mm)			ϕ150			
Auxiliary electric heater(kW)			2			
Default Water Temperature(℃)			55			
Working Temperature Range(℃)			-7-43			
Unpacked Dimension (mm)	Φ620*1650	Φ620*2050	Φ620*1672	Φ620*2050	Φ620*1650	Φ620*2050
Packed Dimension (L*W*H)(mm)	700*700*1755	700*700*2155	700*700*1790	700*700*2155	700*700*1755	700*700*2155
Net Weight(kg)	95	115	110	117	100	119
Gross Weight(kg)	113	135	125	137	118	139
Noise（dB(A))			48			

** Above results are tested at ambient temperature DB20℃/WB15℃, water temperature in 10℃/out 55℃ according to EN16147:2017

* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

All-in-One Heat Pump Water Heater

Side Inlet/Outlet

Features & Advantages

- Square and uniform design
- IPX4 class, ideal for outdoor application
- Axial ventilation design for higher efficiency
- Microchannel heat exchanger with excellent efficieny
- R290 / R134a optional
- WIFI smart control

YT-200|250 TC2 YT-150|200|250 TC1

Model	YT-200TC2	YT-250TC2	YT-150TC1	YT-200TC1	YT-250TC1
Refrigerant	R290	R290	R134a	R134a	R134a
Power Supply			220 ~ 240V/1/50Hz		
Heating Capacity at Air 20℃/15℃, Water Temperature from 15℃ to 55℃					
Rated Heating Capacity（kW）	2.9	2.9	2.4	2.4	2.4
Rated Input Power（kW）	0.7	0.7	0.57	0.57	0.57
COP	4.3	4.3	4.1	4.1	4.1
Max Current (A)	16.0	16.0	15.0	15.0	15.0
Tank Capacity (L)	200	200	150	200	250
Outer Casing / Shape			Full colour painted casing / Square		
Expansion Valve			Electronic		
Air Flow (m^3/h)			450		
Air Discharge			Horizontal		
Air Duct Diameter			Non-ducted		
Back-up Heater（kW）			2		
Default Water Temperature（℃）			55		
Working Temperature Range（℃）			-7~43		
Unpacked Dimension(L*W*H)(mm)	600*600*1600	600*600*1830	500*500*1670	600*600*1600	600*600*1830
Packed Dimension(L*W*H)(mm)	700*700*1770	700*700*2050	640*640*1840	700*700*1770	700*700*2050
Net Weight（kg）	118	136	92	118	136
Gross Weight（kg）	137	155	110	137	155
Noise（dB(A)）	48	48	48	48	48

* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

WALL MOUNTED WATER HEATER

With Horizontal/Vertical

Features & Advantages

- Horizontal/Vertical optional
- Multiple running mode
- Maximum outlet water temperature up to 75℃
- Silent running, low to 38dB(A)

YT-060|080|100 GV YT-060|080|100 GH

Model	YT-060GV	YT-080GV	YT-100GV	YT-060GH	YT-080GH	YT-100GH
Installation	Vertical	Vertical	Vertical	Horizontal	Horizontal	Horizontal
Power Supply			220 ~ 240V/1/50Hz			
Heating Capacity at Air 20℃/15℃, Water Temperature from 15℃ to 55℃						
Heating Capacity (W)	600	600	600	600	600	600
Power Input (W)	169	169	169	169	169	169
COP	3.50	3.50	3.50	3.50	3.50	3.50
Hot Water Production (L/h)	12	12	12	12	12	12
Refrigerant			R134a			
Electric Heating Element（kW)			2			
Max Power Input（kW)			2.5			
Max Current (A)			11.4			
Water Tank Volume (L)	60	80	100	60	80	100
Max Water Tank Pressure			0.8MPa			
IP Class			IPX4			
Working temperature range（℃)			-7 ~ 43			
Net Dimension(mm)	Φ470*977	Φ470*1142	Φ470*1282	Φ470*890	Φ470*1040	Φ470*1180
Package Dimension(L*W*H)(mm)	565*585*1010	565*585*1180	565*585*1320	565*570*960	565*570*1100	565*570*1250
Net Weight（kg)	39	42	45	39	42	50
Gross Weight（kg)	43	46	58	43	46	54
Noise（dB(A))			38			
Air Duct			Non-ducted			

* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

Swimming Pool Heat Pump

Top discharge air outlet

Features & Advantages

- Fully Inverter with R32 refrigerant
- High-end Mitsubishi compressor
- Titanium heat exchanger
- Premium touch screen display
- Heating, Cooling & Automatic mode
- Built-in WiFi function
- Top discharge air outlet
- Multi-protection for safe operation

BYC-007|010|013|017|021|030|035 TV1

BYC-030|035 TV3

Model	BYC-007TV1	BYC-010TV1	BYC-013TV1	BYC-017TV1	BYC-021TV1	BYC-030TV1	BYC-035TV1	BYC-030TV3	BYC-035TV3
* Heating Capacity at Air 26℃, Humidity 80%, Water 26℃ in, 28℃ out									
Heating Capacity (kW)	7.2~1.7	9.2~2.3	12.5~3.0	16.5~3.8	21~4.8	28~6.8	35~8.8	28~6.8	35~8.8
Power Input (kW)	1.06~0.11	1.35~0.15	1.84~0.19	2.43~0.24	3.09~0.30	4.12~0.43	5.15~0.56	3.97~0.43	5.15~0.56
COP	15.8~6.8	15.8~6.8	16~6.8	15.8~6.8	15.8~6.8	15.8~6.8	15.8~6.8	15.8~6.8	15.8~6.8
* Heating Capacity at Air 15℃, Humidity 70%, Water 26℃ in, 28℃ out									
Heating Capacity (kW)	5.9~1.4	7.4~1.9	9.5~2.3	13.1~3	16.5~3.8	23~5.5	25.5~6.4	23~5.5	25.5~6.4
Power Input (kW)	1.2~0.18	1.51~0.25	1.9~0.30	2.67~0.39	3.37~0.5	4.7~0.72	5.2~0.84	4.7~0.72	5.2~0.84
COP	7.6~4.9	7.6~4.9	7.6~5	7.6~4.9	7.6~4.9	7.6~4.9	7.6~4.9	7.6~4.9	7.6~4.9
* Cooling Capacity at Air 35℃, Water 29℃ in, 27℃ out									
Cooling Capacity (kW)	4.2~1.0	5.3~1.3	7.2~1.7	9.4~2.1	11.6~2.7	14.9~3.8	19.3~4.9	14.9~3.8	19.3~4.9
Power Input (kW)	1.11~0.15	1.4~0.19	1.89~0.25	2.47~0.31	3.05~0.4	3.92~0.57	5.08~0.73	3.92~0.57	5.08~0.73
EER	6.6~3.8	6.7~3.8	6.7~3.8	6.7~3.8	6.7~3.8	6.7~3.8	6.7~3.8	6.7~3.8	6.7~3.8
* General data									
Power supply	220~240V/1/50Hz							380~415V/3/50Hz	
Max Power Input (kW)	1.45	1.75	2.2	2.5	3.2	4.45	6.43	4.76	6.93
Max Current (A)	7.1	8.3	10.2	11.9	14.7	20.4	30	7.9	11.3
Water Flow Volume (m^3/h)	2.5	3.5	4.5	5.5	6.5	9	12	9	12
Refrigerant	R32								
Heat Exchanger	Titanium								
Air Flow Direction	Vertical								
Automatic defrosting	by 4 way valve								
Working temp. range (℃)	-15~43								
Casing Material	ABS								
Water Proof Level	IPX4								
Noise level 1m dB(A)	39~49	40~52	42~53	43~55	45~56	47~58	49~59	47~58	49~59
Noise level 10m dB(A)	20~29	20~32	22~33	23~35	25~36	27~38	29~39	27~38	29~39
Net Weight (kg)	44	46	55	57	61	86	92	86	92
Gross Weight (kg)	55	57	68	70	72	96	104	96	104
Net Dimensions (mm)	530*530*640	530*530*640	650*650*770	650*650*770	650*650*770	715*715*955	715*715*955	715*715*955	715*715*955
Package Dimensions (mm)	560*600*780	560*600*780	680*720*910	680*720*910	680*720*910	765*785*1080	765*785*1080	765*785*1080	765*785*1080

* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

Swimming Pool Heat Pump

Top discharge air outlet

Features & Advantages

- R410A refrigerant, environmental friendly
- Higher water temperature output up to 40ºC
- Titanium heat exchanger, corrosion resistance
- High pressure protection
- Defrost automatically
- With MODBUS communication
- Full automatically operation

YC-025|050|075|120|170|220 TA1

Model	YC-025TA1	YC-050TA1	YC-075TA1	YC-120TA1	YC-170TA1	YC-220TA1
Power Supply			380~415V/3/50Hz			
Heating Capacity at Air 27℃/24℃, Water 27℃ in, 29℃ out						
Heating Capacity (kW)	25	50	70	120	170	220
Power Input (kW)	4.2	8.4	11.7	20.1	28.6	37.6
COP	5.91	5.95	5.96	5.98	5.95	5.85
Heating Capacity at Air 15℃/12℃, Water 26℃ in, 28℃ out						
Heating Capacity (kW)	20	42	60	100	140	185
Power Input (kW)	4.1	8.6	12.3	20.4	28.9	38.6
COP	4.86	4.88	4.89	4.89	4.85	4.79
Cooling Capacity at Air 35℃/24℃, Water 29℃ in, 27℃ out						
Cooling Capacity (kW)	18	36	55	85	120	160
Power Input (kW)	5.3	10.5	15.9	24.6	35.2	47.6
EER	3.39	3.42	3.45	3.45	3.41	3.36
Max Power Input (kW)	6.9	13.2	20.1	29.1	4£.5	67.2
Max Current (A)	12.3	23.5	35.9	52.2	87.0	121.1
Refrigerant			R410A			
Heat Exchanger			Titanium			
Expansion Valve			Electronic			
Air Flow Direction			Vertical			
Working temperature range (℃)			-15 ~ 43			
Water connection(mm)	50	65	65	75	90	110
Water Flow Volume (m^3/h)	10	20	30	50	70	85
Noise (dB(A))	≤57	≤59	≤62	≤66	≤66	≤70
Net Weight (kg)	120	250	450	760	900	1200
Net Dimensions(L*W*H) (mm)	765*691*1055	1416*752*1055	1250*1076*1870	2150*1078*2258	2150*1078*2258	2150*1078*2258

* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

Swimming Pool Heat Pump

Top discharge air outlet

Features & Advantages

- Full inverter, higher COP, better performance
- R32 refrigerant, environmental friendly
- Titanium heat exchanger, corrosion ressistance
- Touch-screen controller, easy operation
- WIFI function included
- MODBUS communication
- Heating, cooling & Auto function included

BYC-070|103|136 TA1

Model	BYC-070TA1	BYC-103TA1	BYC-136TA1
Power Supply		380~415V/3/50Hz	
Heating Capacity at Air 26℃, Water 26℃, Humidity 80%			
Heating Capacity (kW)	70 ~ 16.5	103 ~ 24.8	136 ~ 32.4
Power Input (kW)	10.03 ~ 1.02	14.80 ~ 1.54	19.46 ~ 2.01
COP	16.11 ~ 6.98	16.09 ~ 6.96	16.15 ~ 6.99
Heating Capacity at Air 15℃, Water 26℃, Humidity 70%			
Heating Capacity (kW)	51 ~ 12.1	76 ~ 18.3	101 ~ 23.9
Power Input (kW)	10.24 ~ 1.6	15.29 ~ 2.42	20.24 ~ 3.15
COP	7.56 ~ 4.98	7.55 ~ 4.97	7.59 ~ 4.99
Cooling Capacity at Air 35℃, Water 27℃			
Cooling Capacity (kW)	38 ~ 9.1	58 ~ 14.1	76 ~ 18.5
Power Input (kW)	10.41 ~ 1.36	15.89 ~ 2.11	20.65 ~ 2.74
EER	6.69 ~ 3.65	6.68 ~ 3.65	6.74 ~ 3.68
Rated Power Input (kW)	10.0	15.0	20.0
Rated Current (A)	18	27	36
Max Power Input (kW)	15.0	22.0	30.0
Max Current (A)	26	38	54
Refrigerant		R32	
Compressor Type		Mitsubishi inverter	
Heat Exchanger		Titanium	
Expansion Valve		Electronic EEV	
Air Flow Direction		Vertical	
Water Flow Volume (m^3/h)	20	30	40
Water connection (mm)	63	63	75
Working temperature range (℃)		-15 ~ 43	
Heating temperature range (℃)		15 ~ 40	
Cooling temperature range (℃)		8~28	
Noise (dB(A))	≤59	≤62	≤65
Net Weight (kg)	280	420	750
Gross Weight (kg)	320	460	810
Net Dimensions (L*W*H)(mm)	1416*752*1055	1250*1080*1870	2150*1080*2180
Package Dimensions (L*W*H)(mm)	1580*880*1150	1300*1100*1950	2230*1120*2200

* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

Solar Hybrid air consitioner

SAC-012/018/024TB1

Features & Advantages

- Max100% Energy Saving
- Full DC
- ECO Control
- No Solar Charge Controller Battery Bank
- Working Temp.Range (-10℃ to 58 ℃)
- ACDC Auto-Balance

Model		--	HYBRID-ACDC12YM	HYBRID-ACDC18YM	HYBRID-ACDC24YM
Wires/connector/qty			PV1-F4mm/MC4/50M	PV1-F4mm/MC4/50M	PV1-F4mm/MC4/50M
Max electric current/peak current			12/15A	12/15A	12/15A
Power Supply	Rated Voltage	V ~	208-240	208-240	208-240
	Rated Frequency	Hz	50/60	50/60	50/60
	HYbrid Solar DC	V-	70-350	70-350	70-350
	Min/Max. Voltage	V ~	150/265	150/265	150/265
Solar Dc Current	Max.Current	A	12.00	12.00	12.00
Rated Current	Cooling Rate Current	A	3.85	5.88	8.73
	Heating Rate Current	A	4.02	5.80	8.91
Rated Power	Cooling Rate Power	W	860	1340	1920
	Heating Rate Power	W	905	1320	1960
Min. Power Input		W	180	220	280
Max. Power Input		W	1500	1900	2700
Cooling Capacity		W	3500	5000	7220
		Btu/h	12000	17100	24692
Min. Cooling Capacity		W	1300	1700	2100
		Btu/h	4500	5800	7150
Max. Cooling Capacity		W	3950	5450	7800
		Btu/h	13500	18600	26668
Heating Capacity		W	3500	5250	7050
		Btu/h	12050	1800	24000
Min. Heating Capacity		W	1130	1310	1400
		Btu/h	3850	4500	4777
Max. Heating Capacity		W	4300	5800	8600
		Btu/h	14600	19600	29343
EER		W/W	4.02	3.74	3.76
		Btu/W	13.74	12.79	12.86
SEER		Btu/W	23.00	21.00	20.00
COP		W/W	3.87	4.01	3.75
		Btu/W	13.34	13.70	12.80
HSPF		Btu/W	9.70	9.55	9.60
Indoor Unit	Indoor Unit Model	--	HYBRID-ACDC12YMI	HYBRID-ACDC18YMI	HYBRID-ACDC24YMI
	Fan Type	--	Cross-flow	Cross-flow	Cross-flow
	Indoor Unit Air Flow Volume	m^3/h	700	1000	1220
	Set Temperature Range	℃	16~32	16~32	16~32
	Set Temperature Range	℉	60 ~ 90	60 ~ 90	61 ~ 90
	Sound Pressure Level(SH/H/L/SL)	dB (A)	24-37-42	30-42-45	38-45-49
	Dimension (W×H×D)	mm	910*330*233	970*330*233	1080*330*233
	Dimension of Package(W×H×D)	mm	980*380*315	1040*395*315	1165*395*315
	Stacked Layers	—	7	7	7
	Net Weight	kg	11	13	13
	Gross Weight	kg	13	15	15
Outdoor Unit	Outdoor Unit Model	--	HYBRID-ACDC12YO	HYBRID-ACDC18YO	HYBRID-ACDC24YO
	Compressor Trademark		HIGHLY	HIGHLY	HIGHLY
	Compressor Model	--	GSX102SKQA6JL	GSD113RKQF6JV6B	GTD163RKRF8JT6
	Compressor Type	--	Rotary	Rotary	Rotary
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3	4.3	4.3
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5	2.5	2.5
	Maximum Allowable Pressure	MPa	4.3	4.3	4.3
	Cooling Operation Ambient Temperature Range	℃	0~55	0~55	0~55
	Heating Operation Ambient Temperature Range	℃	-15~32	-15~32	-15~32
	Sound Pressure Level	dB (A)	52	54	56
	Dimension (W×H×D)	mm	797*556*336	874*559*368	989×715×400
	Dimension of Package(W×H×D)	mm	860*600*360	915*605*395	1040*780*450
	Stacked Layers		4	4	4
	Net Weight	kg	27	31	44
	Gross Weight	kg	30	34	49
	Refrigerant	--	R32	R32	R32
	Refrigerant Charge	kg	0.80	0.95	1.20
Application Area		m^2	14 ~ 24	21 ~ 30	30 ~ 45
Loading Quantity	"Loading Quantity (20GP Container) "	unit	85	75	58
	"Loading Quantity(40GP Container) "	unit	180	155	120
	"Loading Quantity(40HQ Container) "	unit	220	180	135

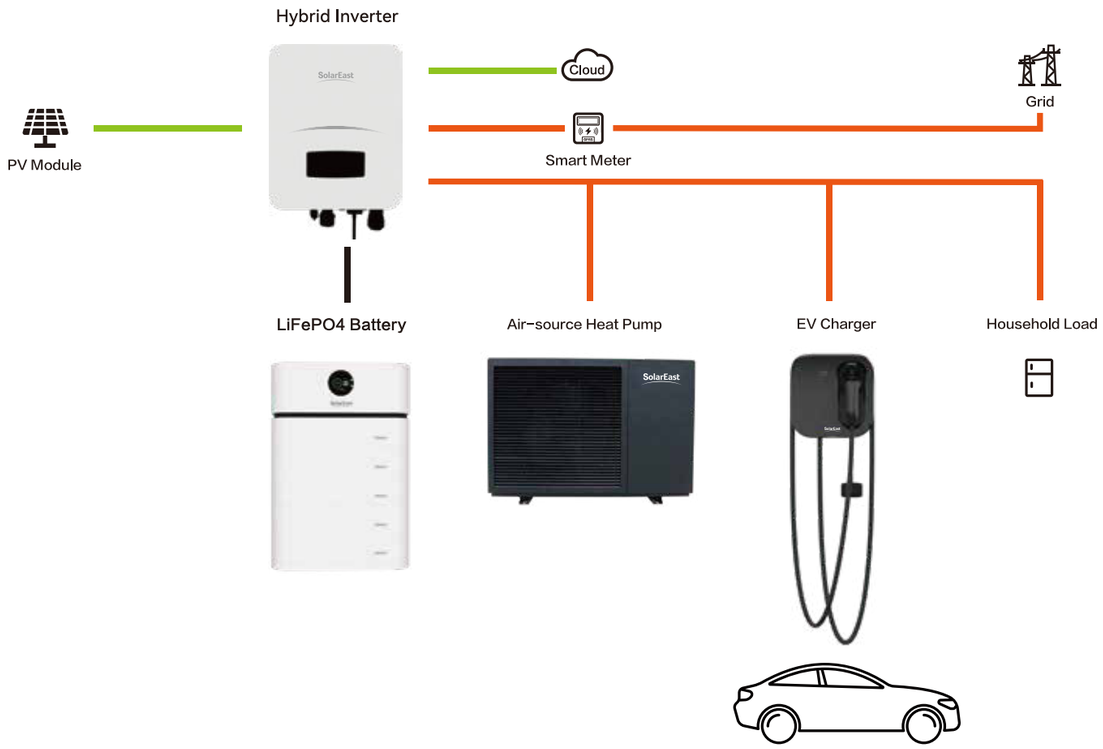
05 INTEGRATED CLEAN ENERGY SOLUTION

PV+Energy Storage+Heat Pump+EV Charger

The Company can provide customers with "PV+storage+thermal/charging" combined system, which integrates low-cost power generation with power storage, realizing clean, efficient and cost-efficient energy end use.

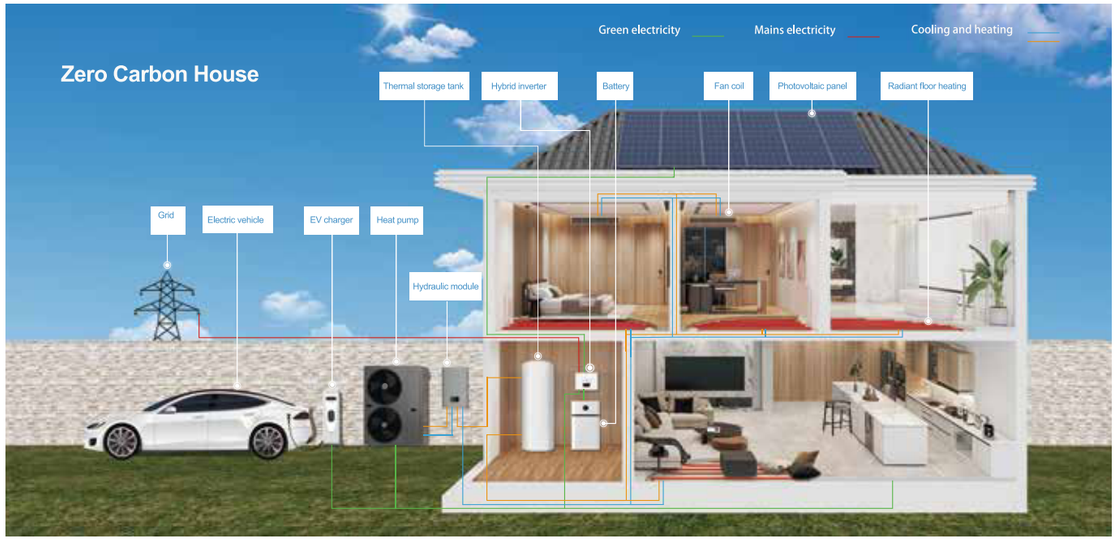
The system includes PV module, hybrid inverter, energy storage battery module and air-source heat pump and/or EV charger.

The PV module adopts high-efficient mono-crystalline cells, which can be installed on the roof or ground according to the specific situation of users to better achieve clean and low-cost power supply. The energy storage module stores part of the electricity generated by the photovoltaic module and uses it at night or when the light is poor, therefore improving the utilization rate of the solar panels and reducing the use cost; while the air-source heat pump module uses heat pumps for heating, which can save 70% of electricity.



Smart Energy Management System

With our self-developed smart home terminal based on IOT technology, our products can work smoothly together and play nice with the other devices in your house, therefore improving the quality of your life in terms of automation, security, comfort, and convenience.



06 PROJECT DEVELOPMENT

For those big power consumers, such as steel factories and chemical plants, the Company can work out feasibility study report and customize the energy storage facilities accordingly based on their load characteristics, with a view to helping them save power bill, postpone transformer capacity expansion, enhance utilization of PV power generation, and improve electrical safety alike through the means of peak load shifting and other avenues.

The Company provides overall solutions encompassing engineering, procurement, construction, operation & maintenance, and can offer financing for the eligible clients.

10MW/39MWh Energy Storage Station

Overseas project cases








PV+Solar Thermal+Energy Storage Project, Tibet

PV+Storage+Thermal project for 17 elementary schools, Tibet

Industrial & Commercial Energy Storage Project, Guangdong

Heat Pump Project, Jingtu Industrial Park in Caina Town, Tibet

07 | FLEXIBLE COOPERATION

1

Regional Distributors

2

OEM/ODM

3

Integrated Solutions