



# SolarEast Energy Storage Technology Co.,Ltd



SolarEast Energy Storage Technology Co., Ltd

Tel: +86-19530350830

<https://www.solareastess.com/>

Email: [jameszhao@solareast.com](mailto:jameszhao@solareast.com)

Address: 199 South Yingzhou Road, Lianyungang, Jiangsu, China 222243

*Power Just In 'Case'*



# 01 | SOLAREAST INTRODUCTION

Founded in 1999, SolarEast is a technological innovation-based enterprise that is publicly listed on Shanghai Stock Exchange (Stock code: 603366.SS). Committed to making a 'clean world and beautiful 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.



5

Production bases across China



25

Years' experience



2 GWh

Annual residential ESS production capacity



10 GWh

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



6,000+

Employees





▸ 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



▸ 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.



▸ 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



## 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.



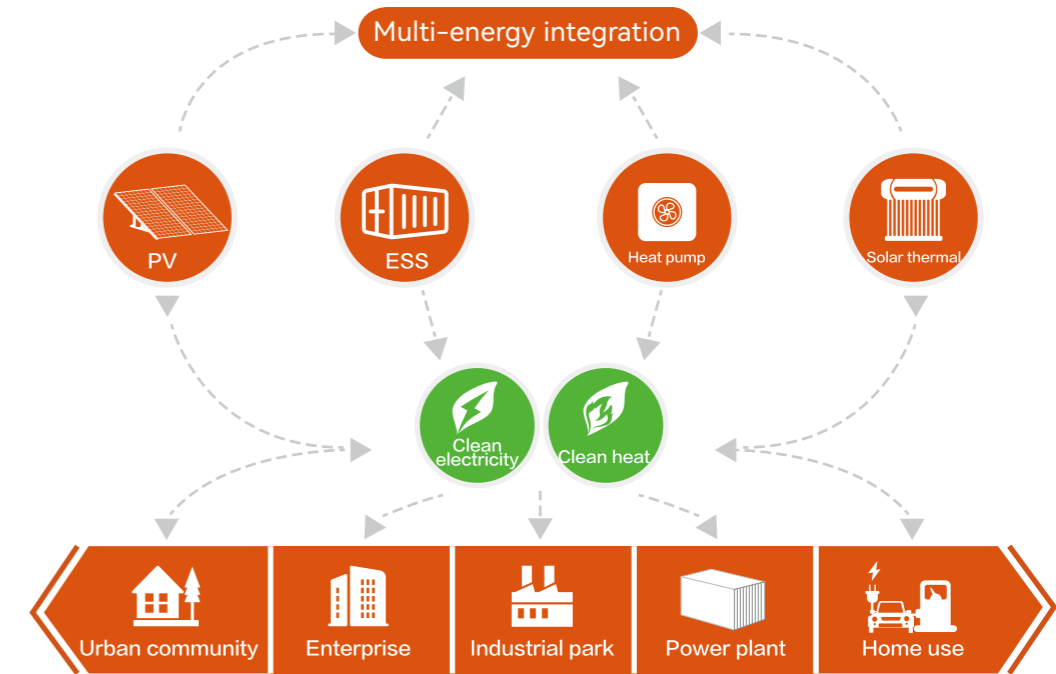
## Comprehensive Clean Energy Solution

**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





# 02 | BATTERY ENERGY STORAGE PRODUCTS

## ▸ Stack-mounted Residential ESS

### ▸ Features & Advantages

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

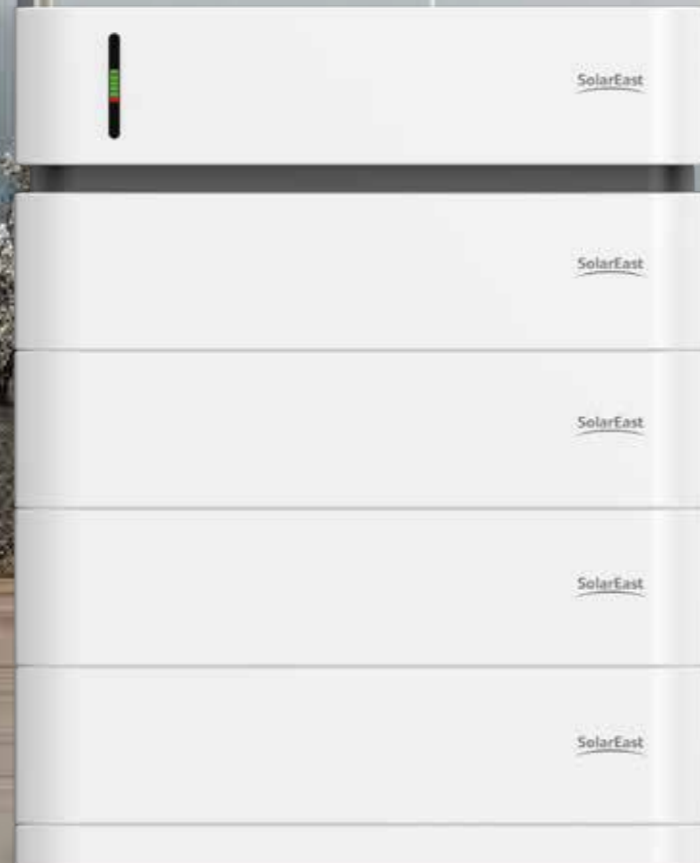
**Accuracy**  
Dynamic SOC calibration

**Compatibility**  
Suitable for most mainstream inverters

**Easy Installation**  
Modular design, stackable up to 56 packs

**Durability**  
6,000 cycles at 95% DOD

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



### ▸ 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 voltage	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°C					
Altitude	≤5,000m					
Humidity	5% ~ 95%					
Warranty	10 years (5 free warranty + 5 paid warranty)					
Dimension	660*390*515mm	660*390*665mm	660*390*815mm	660*390*965mm	660*390*1115mm	660*390*1265mm
Net weight	110kg	156kg	202kg	248kg	294kg	340kg
Certificates	CE-EMC,IEC62619,IEC62477,IEC62040,IEC62100,IEC60068-2-52,IEC60730,UN38.3,MSDS					
Installation	Ground Installation					

## Stack-mounted Residential ESS

### Features & Advantages



#### Safety

LFP Battery, Intelligent BMS and protective hardware providing complete protection



#### Beauty

Furniture style that goes together with your home



#### Compatibility

Suitable for most mainstream inverters



#### Easy Installation

Modular design, stackable up to 21packs



#### Durability

6,000 cycles at 95% DOD



#### Certificates

CE, IEC62619, IEC61000, IEC62040, IEC63056, 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	15.67kWh	20.89kWh	26.11kWh	31.33kWh	36.56kWh
Usable energy	4.96kWh	9.92kWh	14.88kWh	19.85kWh	24.81kWh	29.77kWh	34.73kWh
Voltage	51.2V						
Max. charging voltage	57.6V						
Nominal charging current	50A	100A	150A	160A	160A	160A	160A
Discharging cut-off voltage	44.8V						
Battery efficiency	95%						
Max. recommended DOD	95%						
Communication	RS485/CAN						
IP rating	IP55						
Operating temperature	-10 ~ 50°C						
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	15.67kWh	20.89kWh	26.11kWh	31.33kWh	36.56kWh	
Usable energy	9.92kWh	14.88kWh	19.85kWh	24.81kWh	29.77kWh	34.73kWh	
Voltage	256V						
Nominal charging voltage	102.4V	153.6V	204.8V	288V	307.2V	358.4V	
Max. charging/discharging current	115.2V	172.8V	230.4V	50A	345.6V	403.2V	
Discharge cut-off voltage	224V						
Battery efficiency	89.6V	134.4V	179.2V	95%	268.8V	313.6V	
Maximum recommended DOD	95%						
Communication	RS485/CAN						
IP rating	IP55						
Operating temperature	-10 ~ 50°C						
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						

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

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

## Multiple-use Residential ESS

### Features & Advantages



#### Safety

- LiFePO4 safe battery chemistry
- Smart built-in BMS and comprehensive hardware protection



#### Accuracy

- Dynamic SOC calibration



#### Compatibility

- Compatible with most mainstream inverters
- Compact furniture style, suitable for wall mounting that saves installation space



#### Expandability

- Support up to 6 PACKs in parallel connection



#### Durability

- 6,000 cycles at 95% DOD



#### Certificates

- CE, IEC62619, UN38.3, MSDS



### 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.recommended DOD	95%
Operating Condition	Indoor
Operating Charge	0~55°C
Temperature Discharge	0~55°C
Standard Ambient Temperature Range	0~40°C
Storage Temperature Range	> 1 month 0~35°C / ≤1 month -20~45°C
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,IEC61000-6-1,IEC61000-6-3,IEC62040,IEC63056,UN38.3,MSDS
Warranty	10 years (5 free warranty + 5 paid warranty)

Testing conditions based on temperature 25°C 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

### 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
<b>PV Input</b>							
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						
<b>Battery Port</b>							
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.						
<b>AC Grid</b>							
Max Continuous Current	14.0 A	17.0 A	19.0 A	22.0 A	23.0A	26.0 A	28.0 A
Max Continuous 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 %						
<b>AC Load Output (Back-up)</b>							
Max Continuous Current	14.0 A	17.0 A	19.0 A	22.0 A	23.0 A	26.0 A	28.0 A
Max Continuous Power	3.0 kVA	3.6 kVA	4.0 kVA	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						
<b>Efficiency</b>							
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 %			
<b>Protection</b>							
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
<b>General Data</b>							
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 °C						
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						

	<b>PowerCool-LFP-VLV</b>					
	1pcs	2pcs	3pcs	4pcs	5pcs	6pcs
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 °C			
	Discharging		0~55 °C			
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°C at the beginning of life.

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

## ▸ 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

**Expandability**  
Support parallel connection number up to 10

**Durability**  
6,000 cycles at 90% DOD, 15+ years design life

**Certificates**  
CE, IEC62619, 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°C
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	5 Year Product Warranty, 10 Year Performance Warranty
Dimension	560*390*131mm
Net weight	45kg
Case Material	Metal
Color	Black
Installation	Ground Installation

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

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



## Commercial & Industrial ESS

### Features & Advantages

- Light weight, high strength all-aluminum box structure**  
 -All-Aluminum case is sturdy and durable
- Efficient liquid cooling runner design, good temperature uniformity**  
 -Liquid cooling design with good thermal conductivity
- Safe and efficient management of BMS system**  
 -Safe, efficient and well-balanced



### Technical Specifications

Model		Technical indicators
Nominal voltage		153.6V
Nominal capacity		280Ah
Nominal power		43.008kWh(@25° C±2)
Efficiency		≥94%@0.5P Room temperature
Differential pressure at the end of charging and discharging		≤350mV
Max. constant charging/discharging power		0.5P
Nominal charging/discharging current		140A
Range of operating voltage		129.6V ~ 172.8V
Max. range of working temperature	Charging	0°C ~ 55°C
	Discharging	-30°C ~ 55°C
Best working temperature	Charging	25°C ± 2°C
	Discharging	25°C ± 2°C
Transport and storage temperature		-20°C ~ 45°C -20°C ~ 25°C
Maximum temperature of national standard full cycle battery cell		35°C
Maximum temperature difference of national standard full cycle battery cell		4°C
Insulation property		resistance value ≥ 500MΩ @ 2500VDC
Withstand voltage		Leakage current ≤ 1mA @ 4500VDC, No sparks or breakdowns
IP rating		≥ IP67
Environment humanity		< 90%RH ( non-condensing )
Way of cooling		Liquid cooling
Weight		340kg
Dimension(width*depth*height)		810 ± 2mm × 1063 ± 3mm × 240 ± 2mm
Shell material		Aluminium

Parameter	Specification	Notes
Standard charging mode	Continuous charging at 140A constant current to 3.6V single cell voltage at room temperature.	
Standard charging temperature	25°C ± 2°C	Battery temperature
Absolute charging temperature	0°C ~ 55°C	Regardless of the charging mode of the battery, once the battery temperature is found to exceed the absolute charging temperature range, it will stop charging.
Absolute charging voltage	MAX 3.65V	Regardless of the charging mode of the battery, including pulse charging, once the battery voltage is found to exceed the absolute charging voltage range, it will stop charging.

Parameter	Specification	Notes
Standard discharge mode	Continuous discharge at 140A constant current to 2.8V single cell voltage at room temperature.	
Standard discharging temperature	25°C ± 2°C	Battery temperature
Absolute discharging temperature	-30°C ~ 55°C	Regardless of the charging mode of the battery, once the battery temperature is found to exceed the absolute discharge temperature range, it will stop discharging.
Absolute discharging Voltage	MIN 2.5V	Regardless of the charging mode of the battery, including the pulse charging state, once the battery voltage is found to be below the absolute charging voltage range, it will stop discharging.

## Commercial & Industrial ESS

### Features & Advantages

#### High efficiency

- Intelligent temperature control system that improves system efficiency and battery cycles
- Bi-directional converter that is characterized by constant current, voltage and power during charging
- Reduce loss incurred from paralleling mismatch among battery clusters
- Avoid system risks caused by the ring current of battery clusters

#### High-precision & Smart

- Meet smart grid design specifications;
- Electrical isolation that supports off-line function, featuring strong grid adaptability;
- Cloud platform that realizes remote maintenance and monitoring
- EMS built in that adapts to multiple operational modes and supports the independent operation of micro-grid to increase profitability for the user.

#### Easy & Flexible

- Modular design of PCS on AC side that facilitates installation and maintenance;
- Support multiple PCS parallel connection, making more flexible configuration possible;
- Cabinet transport, easy site construction;
- Digitalized data interaction.



The Product can be provided on OEM/ODM basis

### Technical Specifications

	SE215L-100K	SE232L-125K
<b>AC Side</b>		
AC Rated Power	100Kw	125Kw
Max. Output Power	110Kw	137.5Kw
Allowable Grid Voltage Range	400V (-15%~10%)	400V (-15%~10%)
Allowable Grid Frequency Range	50/60Hz±2.5Hz	50/60Hz±2.5Hz
Rated Current	151A	181A
Max. PCS Efficiency	98%	98%
Way of Connection	3P4W+PE	3P4W+PE
<b>DC Side</b>		
Cell Specification	LFP 3.2V/280Ah	LFP 3.2V/280Ah
Battery PACK Configuration	1P48s/43kWh	1P52s/46.61kWh
System Capacity	1P240S	1P260S
Voltage Range	215.04kWh	232.96kWh
Voltage Range	648~864V	702~936V
Charge/discharge Ratio	≤0.5P	≤0.5P
<b>Battery System</b>		
Dimension	1000*1350*2391mm( Incl. lifting lug) 1000*1350*2300mm( Excl. lifting lug)	1000*1350*2391mm( Incl. lifting lug) 1000*1350*2300mm( Excl. lifting lug)
Weight	2400kg	2550kg
Noise	<75dB	<75dB
IP Class	IP54	IP54
System Efficiency	>88%	>88%
Cooling Type	Liquid cooling	Liquid cooling
Environmental Temperature	-30~55 °C	-30~55 °C
Humidity	≤95%	≤95%
Altitude	>2000m Derating	>2000m Derating
Fire Extinguishing Method	Aerosol/Perfluoro (Optional)	Aerosol/Perfluoro (Optional)
Communication Interface	Ethernet	Ethernet
Communication Protocol	IEC61850/MODBUS-RTU/MODBUS-TCP	IEC61850/MODBUS-RTU/MODBUS-TCP



## ▸ Large-scale ESS

### ▸ Features & Advantages

#### High safety

- LiFeO4 cells that feature high thermal stability
- IP55 that satisfies outdoor applications
- Protection class C5 that ensures 20-year service life
- Precaution-oriented fire protection strategy; independent fire-extinguishing system

#### Durability

- Integrated high-efficiency liquid cooling system
- Temperature difference in the container is less than 5°C

#### High integration

- Modular design, 1000V/1500V system
- Compartmentalized electrical control system and batteries that facilitates system maintenance
- Non-walk-in/modular & high-integrated design that saves land coverage by 35%
- Support assembly as a prefabricated cabinet, which reduces on-site installation cost & saves commissioning time



### ▸ Technical Specifications

<b>Model</b>	SEESS630
Battery type	3.2V, 314 Ah
Max. connection number	1P416S*12
Total energy	5015.96kWh
Rated power (0.5P)	2500kW
Voltage range (DC)	1040V~1497.6V
<b>System</b>	
Dimension (W*H*D)	6250mm *2896mm*2438mm
Weight	≤42T
IP class	IP55 (Pack IP67)
Operating temperature	-20~50°C
Humidity	0-95%RH (no condensation)
Altitude	≤3000m (Standard) /≤5000m(Optional)
Thermal control	Liquid cooling/50% ethylene glycol
Fire protection system	PACK-level Perfluoro, Aerosol (Optional)
Corrosion resistance	C4-M (C5-H alternative)
Communication protocol	CAN/Ethernet
Certificates	GB/T36276

#### Disclaimer

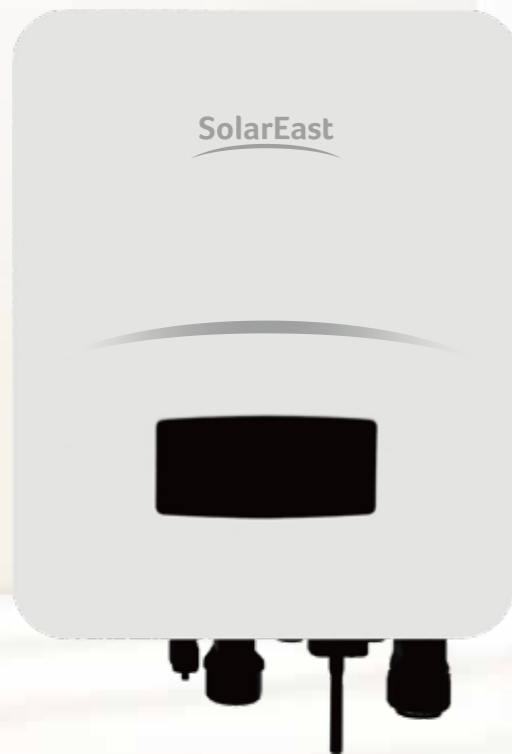
All efforts are exerted to ensure all the information herein is full and accurate. The Company reserves the right to revise relevant data and parameters from time to time without prior notice.

# 03 | HYBRID INVERTER

## ▸ Single-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 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°C	
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
- 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 8KHP3	Ares 10KH3	Ares 12KH3	Ares 15KH3
Max. DC Input Power	12kW	15kW	18kW	22.5kW
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		20+32
Max. Short Current		30x2A		30+48
No. of MPPT Tracker / Strings		2/2		2/3
Battery Port				
Battery Nominal Voltage	200V	400V	450V	500V
Battery Voltage Range	80-600V	150-800V	150-800V	150-800V
Max. Charge/Discharge Current	50A	30A	30A	50A
Max. Charge/Discharge Power	8KW	10KW	12KW	15KW
Charging Curve		3 Stages		
Compatible Battery Type		Li-ion battery		
AC Grid				
Nominal AC Output Power	8kW	10kW	12kW	15kW
Max. AC Input/Output Power	12/8.8kVA	15/11kVA	18/13.2kVA	22.5/16.5kVA
Max. AC Output Current	13.5A	17A	21.5A	27A
Nominal AC Voltage		230/400V		
Nominal AC Frequency		50/60Hz		
Power Factor		1 (-0.8-0.8)		
Current THD		<3%		
AC Load Output (Back-up)				
Nominal Output Power	8000VA	10000VA	12000VA	15000VA
Nominal Output Voltage		230/400V		
Nominal Output Frequency		50/60Hz		
Nominal Output Current	11.6 A	14.5A	17.4A	21.8A
Peak Output Power	8800VA, 60s	11000VA, 60s	13200VA, 60s	16500VA, 60s
THDV (with linear load)		<3%		
Switching Time		<10ms		
Efficiency				
Europe Efficiency		97.50%		
Max. Efficiency	98.20%	98.20%	98.30%	98.30%
Battery Charge/Discharge Efficiency		98.00%		
Protection				
Reverse Polarity Protection		Yes		
Over Current / Voltage Protection		Yes		
Anti-islanding Protection		Yes		
AC Short-circuit Protection		Yes		
Leakage Current Detection		Yes		
Ground Fault Monitoring		Yes		
Grid Monitoring		Yes		
Enclosure Protect Level		IP65		
General Data				
Dimensions	558 x 535 x 260 mm	370 x 497 x 192 mm	370 x 497 x 192 mm	558 x 535 x 260 mm
Weight	29kg	20.8kg	20.8kg	29kg
Topology		Transformerless		
Cooling Concept		IntelligentFan		
Relatively Humidity		0-100%		
Operating Temperature Range		-25 to 60°C		
Operating Altitude		<4000m		
Noise Emission		<30dB		
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

## ▶ All-In-One Hot Water Heat Pump-R134a

### ▶ Features & Advantages

- R134a refrigerant, environmental friendly.
- CMEV: Central mechanical extract ventilation.
- WIFI smart control.
- Microchannel heat exchanger.
- Higher water temperature output up to 75°C.



### ▶ Technical Specifications R134a



Model	YT-200TB1	YT-300TB1	YT-120TC1	YT-150TC1
Hot Water Capacity	2.5kw	2.5kw	2.5kw	2.5kw
Power Input	0.6kw	0.6kw	0.6kw	0.6kw
COP	4.16	4.16	4.16	4.16
Max Power Input	3kw	3kw	3kw	3kw
Rated Current	2.7A	2.7A	2.7A	2.7A
Max Current	15A	15A	15A	15A
Power Supply			220V/1/50Hz	220V/1/50Hz
Electric Heater	2000w	2000w	2000w	2000w
Refrigerant	R134a	R134a	R134a	R134a
Net Dimension	φ620/1638mm	φ620/2038mm	500*500*1500mm	500*500*1670mm
Package Dimension	700/700/1830mm	700/700/2230mm	640*640*1720mm	640*640*1840mm
Net Weight	88kg	102kg	89kg	92kg
Gross Weight	106kg	120kg	48kg	48kg
Noise	48dB	48dB		
Water Tank Volume	200L	300L	120L	150L
Temperature Range	-7~43°C	-7~43°C	-7~43°C	-7~43°C
Loading Quantity(20ft container)	24	24		
Loading Quantity(40ft container)	51	51		

## ▶ Wall Mounted

### ▶ Features & Advantages

- Horizontal/Vertical optional
- Maximum outlet water temperature up to 75°C
- Multiple running mode
- Silent running, low to 38dBA



### ▶ Technical Specifications R134a



Installation

Wall Mounted-Vertical

Wall Mounted-Horizontal

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



## ► Heating, Cooling and DHW Heat Pump-R290

### ► Features & Advantages



#### Stable Running AT-25°C

Direct current inverter compressor good running at ultra-low temperature environment.



#### R290

With many advantages such as low carbon emission and high efficiency, R290 refrigerant is recognized as a refrigerant with the most development potential in the industry, which contributes to the reduction of carbon emission and help achieve the global goal of carbon neutrality.



#### Convenient IOT

Free WI-FI, intelligent control any time, anywhere.



#### Quiet

Ultra Low noise, enjoy the comfortable environment.



### ► Technical Specifications



Model	BLN-006TC1	BLN-012TC1	BLN-018TC1	BLN-012TC3	BLN-018TC3	
Rated voltage / Frequency	220-240V~ / 50(60)Hz			380-415V/3N~/50(60)Hz		
Heating <sup>1</sup>	Capacity	2.92-9.10kW	4.30-15.20kW	7.24-21.90kW	4.30-15.20kW	7.24-21.90kW
	Input Power	0.61-2.11kW	0.87-3.73kW	1.50-5.88kW	0.87-3.73kW	1.50-5.88kW
	Input Current	2.80-9.25A	4.02-16.38A	6.86-30.25A	1.78-6.04A	2.82-9.16A
	COP	4.31-5.66W/W	4.07-5.57W/W	3.82-5.59W/W	4.07-5.57W/W	3.82-5.59W/W
Heating <sup>2</sup>	Capacity	2.99-8.16kW	4.25-14.55kW	6.36-19.45kW	4.25-14.55kW	6.36-19.45kW
	Input Power	1.03-2.92kW	1.45-4.28kW	2.15-6.85kW	1.45-4.28kW	2.15-6.85kW
	Input Current	4.57-12.79A	6.71-18.80A	9.84-30.12A	2.84-6.78A	3.71-10.60A
	COP	2.79-3.46W/W	2.83-3.45W/W	2.84-3.57W/W	2.83-3.45W/W	2.84-3.57W/W
Cooling	Capacity	1.38-5.70kW	3.65-11.04kW	4.55-17.20kW	3.65-11.04kW	4.55-17.20kW
	Input Power	0.67-2.44kW	1.12-3.97kW	1.85-7.31kW	1.12-3.97kW	1.85-7.31kW
	Input Current	3.06-10.27A	5.18-17.44A	8.47-32.1A	1.97-6.30A	2.99-11.26A
SCOP (Water Temp. At 35°C)	4.83	4.77	4.81	4.74	4.79	
SCOP (Water Temp. At 55°C)	3.71	3.77	3.72	3.70	3.71	
Rated Input Power	3.5kW	5.40kW	7.50kW	5.85kW	10.5kW	
Rated Input Current	15.0A	25.0A	35.0A	10.0A	17.0A	
Refrigerant Type/Charge/GWP	R290/0.55/3/kg	R290/1.05/3/kg	R290/1.4/3/kg	R290/1.05/3/kg	R290/1.4/3/kg	
CO2 Equivalent	0.0017t	0.0032t	0.0042t	0.0032t	0.0042t	
Operation Pressure(Low Side)	0.8MPa	0.8MPa	0.8MPa	0.8MPa	0.8MPa	
Operation Pressure(High Side)	3.0MPa	3.0MPa	3.0MPa	3.0MPa	3.0MPa	
Maximum Allowable Pressure	3.2MPa	3.2MPa	3.2MPa	3.2MPa	3.2MPa	
Electrical Shockproof	I	I	I	I	I	
IP Class	IPX4	IPX4	IPX4	IPX4	IPX4	
Max. Outlet Water Temp.	75°C	75°C	75°C	75°C	75°C	
Operating Ambient Temperature	-25~45°C	-25~45°C	-25~45°C	-25~45°C	-25~45°C	
Water Piping Connections	G1inch	G1inch	G1-1/4inch	G1inch	G1-1/4inch	
Rated Water Flow	1.0m <sup>3</sup> /h	2.06m <sup>3</sup> /h	3.10m <sup>3</sup> /h	2.06m <sup>3</sup> /h	3.1m <sup>3</sup> /h	
Water Pressure Drop	20kPa	20kPa	55kPa	20kPa	55kPa	
Min/Max Water Pressure	0.1/0.3MPa	0.1/0.3MPa	0.1/0.3MPa	0.1/0.3MPa	0.1/0.3MPa	
Sound pressure Level	46dB(A)	53dB(A)	56dB(A)	54dB(A)	56dB(A)	
Net Dimensions ( L×W×H )	1187×418×805mm	1287×448×904mm	1187×488×1456mm	1287×448×904mm	1187×488×1456mm	
Net Weight	110kg	134kg	195kg	134kg	195kg	

Rated Test Conditions:

Heating<sup>1</sup>: Ambient Temp 7°C/6°C(DB/WB),Water-In/Out Temp 30°C/35°C Heating<sup>2</sup>: Ambient Temp 7°C/6°C(DB/WB),Water-In/Out Temp 47°C/55°C Cooling: Ambient Temp 35°C/24°C(DB/WB),Water-In/Out Temp 12°C/7°C

## ► Heating, Cooling and DHW Heat Pump-R32

### ► Features & Advantages



#### Stable running at -25°C

Panasonic EVI direct current inverter compressor good running at ultra-low temperature environment



#### R32

A new generation non-toxic refrigerants with energy-saving, carbon reducing and environment-friendly. No harm to ozone layer, slow down global warming.



#### Quiet

Ultra low noise, enjoy the comfortable environment



#### Convenient IOT

Free Wi-Fi, intelligent control any time, anywhere.



### ► Technical Specifications



Model		BLN-006TB1	BLN-010TB1	BLN-014TB1	BLN-018TB1	BLN-010TB3	BLN-014TB3	BLN-018TB3	BLN-024TB3	
Power Supply	/	220-240V~/50 (60) Hz				380-415V/3N~/50 (60) Hz				
Heating <sup>1</sup>	Capacity	KW	2.50-8.30	4.20-12.20	5.30-16.50	6.20-19.80	4.20-12.20	5.30-16.60	6.20-19.80	6.80-25.90
	Input Power	KW	0.57-1.92	0.86-2.88	1.15-4.15	1.36-5.28	0.86-2.88	1.15-4.15	1.36-5.28	1.78-4.15
	Input Current	A	2.53-8.52	3.82-12.77	5.10-18.41	6.10-23.67	1.46-4.89	1.86-6.70	2.31-8.96	2.87-6.70
Heating <sup>2</sup>	Capacity	KW	2.30-7.62	3.85-11.20	4.90-15.10	6.30-19.90	3.85-11.20	4.90-15.10	6.30-19.90	6.90-26.10
	Input Power	KW	0.75-2.61	1.13-3.75	1.65-5.25	1.65-6.82	1.13-3.75	1.65-5.25	1.65-6.82	1.95-8.55
	Input Current	A	3.32-11.58	5.01-16.6	7.32-23.30	7.40-30.56	1.92-6.37	1.67-8.47	2.80-11.58	3.15-13.80
Cooling	Capacity	KW	1.80-7.10	2.60-10.30	4.50-13.50	5.50-17.50	2.60-10.30	4.50-13.50	5.50-17.50	5.20-20.30
	Input Power	KW	0.61-2.43	0.91-3.65	1.45-4.85	1.65-6.25	0.91-3.65	1.45-4.85	1.65-6.25	1.95-8.20
	Input Current	A	2.71-10.78	4.03-16.19	6.43-21.52	7.40-28.02	1.55-6.2	2.34-7.82	2.80-10.61	3.15-13.23
SCOP (Water Temp. At 35°C)		4.89	4.55	4.58	4.64	4.59	4.62	4.67	4.6	
SCOP (Water Temp. At 55°C)		3.37	3.41	3.39	3.45	3.44	3.44	3.45	3.46	
Rated Input Power	KW	2.71	3.83	6.2	7.5	3.83	6.2	7.5	10	
Rated Input Current	A	12	17	27.5	35	6.5	10.5	13	17	
CO <sub>2</sub> Equivalent	/	0.84t	1.21t	1.89t	2.36t	1.21t	1.89t	2.36t	2.36t	
Maximum Allowable Pressure	MPa	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	
IP Class	/	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	
Max. Outlet Water Temp.	°C	60	60	60	60	60	60	60	60	
Operating Ambient Temperature	°C	-25 ~ 45	-25 ~ 45	-25 ~ 45	-25 ~ 45	-25 ~ 45	-25 ~ 45	-25 ~ 45	-25 ~ 45	
Water Piping Connections	mm	G1	G1	G1-1/4	G1-1/2	G1	G1-1/4	G1-1/2	G1-1/2	
Rated Water Flow	m <sup>3</sup> /h	1.1	1.75	2.52	3.2	1.75	2.52	3.2	4.12	
Water Pressure Drop	kPa	25	27	30	32	27	30	32	35	
Noise Level	dB(A)	49	52	55	56	52	55	56	58	
Net Dimensions ( L×W×H )	mm	1100×445×850	1100×445×850	1110×480×850	1110×445×1450	1100×445×850	1110×480×850	1110×445×1450	1110×445×1450	
Net Weight	kg	102	107	124	151	107	124	151	160	

Rated Test Conditions:

Heating<sup>1</sup>: Ambient Temp 7°C/6°C(DB/WB), Water-In/Out Temp 30°C/35°C

Heating<sup>2</sup>: Ambient Temp 7°C/6°C(DB/WB), Water-In/Out Temp 47°C/55°C

Cooling: Ambient Temp 35°C/24°C(DB/WB), Water-In/Out Temp 12°C/7°C



## Swimming Pool Heat Pump

### Features & Advantages

-  **COP** Full inverter, higher COP, better performance
-  **R32 refrigerant, environmental friendly**
-  **Titanium heat exchanger, corrosion resistance**
-  **Intelligent controller**
-  **WiFi function included**
-  **MODBUS communication**



### Technical Specifications

Model	BYC-007TG1	BYC-010TG1	BYC-013TG1	BYC-017TG1	BYC-021TG1	BYC-030TG1	BYC-030TG3	
Heating Capacity at Air 26°C, Humidity 80%, Water 26°C in, 28°C out								
Heating Capacity (kW)	7.7 ~ 1.8	10~2.3	13.2~3.1	17.1~3.9	21~4.9	28.2~6.9	28.4~7.1	
Power Input (kW)	1.13 ~ 0.11	1.45~0.15	1.91~0.19	2.51~0.25	3.09~0.31	4.15~0.44	4.18~0.45	
COP	15.8 ~ 6.8	15.8~6.9	16~6.9	15.9~6.8	15.8~6.8	15.8~6.8	15.8~6.8	
Heating Capacity at Air 15°C, Humidity 70%, Water 26°C in, 28°C out								
Heating Capacity (kW)	5.7 ~ 1.3	7.9 ~ 1.8	10.1 ~ 2.3	12.8 ~ 2.9	15.9 ~ 3.6	22.1 ~ 5.0	22.1 ~ 5.0	
Power Input (kW)	1.16 ~ 0.17	1.58 ~ 0.23	2.03 ~ 0.30	2.57 ~ 0.38	3.20 ~ 0.47	4.43 ~ 0.65	4.44 ~ 0.65	
COP				7.6 ~ 4.9				
Cooling Capacity at Air 35°C, Water 29°C in, 27°C out								
Cooling Capacity (kW)	4.2 ~ 1.1	5.9 ~ 1.5	7.2 ~ 1.8	9.4 ~ 2.3	11.5 ~ 2.9	15.8 ~ 3.9	15.9 ~ 3.9	
Power Input (kW)	1.13 ~ 0.17	1.57 ~ 0.22	1.89 ~ 0.26	2.51 ~ 0.34	3.16 ~ 0.43	4.19 ~ 0.56	4.18 ~ 0.56	
EER	6.6 ~ 3.7	6.7 ~ 3.7	6.9 ~ 3.8	6.9 ~ 3.8	6.9 ~ 3.7	6.9 ~ 3.8	6.9 ~ 3.8	
Power supply	220 ~ 240V / 1/ 50 Hz						380 ~ 415V / 3/ 50 Hz	
Max Power Input (kW)	1.2	1.6	2.1	2.6	3.2	4.4	4.5	
Max Current (A)	5.5	7.3	9.6	11.9	14.5	20	8.4	
Refrigerant	R32							
Heat Exchanger	Titanium							
Air Flow Direction	Horizontal							
Water Flow Volume (m³/h)	2.5	3.5	4.5	5.5	6.5	9	9	
Automatic defrosting	by 4 way valve							
Working temp. range (°C)	-15 ~ 43							
Water Proof Level	IPX4							
Noise level 1m dB(A)	38~48	39~51	41~52	42~54	44~55	46~57	46~57	
Noise level 10m dB(A)	19~28	19~31	21~32	22~34	24~35	26~37	26~37	
Net Weight (kg)	42	44	53	56	60	88	88	
Gross Weight (kg)	53	55	64	67	71	99	99	
Net Dimensions (mm)	821*405*587	821*405*587	850*405*637	850*405*637	850*405*637	1036*448*739	1036*448*739	
Package Dimensions (mm)	883*435*722	883*435*722	912*435*777	912*435*777	912*435*777	1098*488*879	1098*488*879	

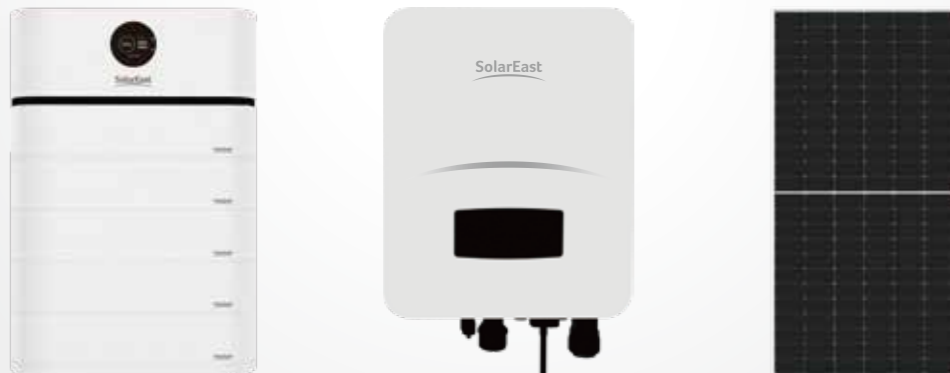
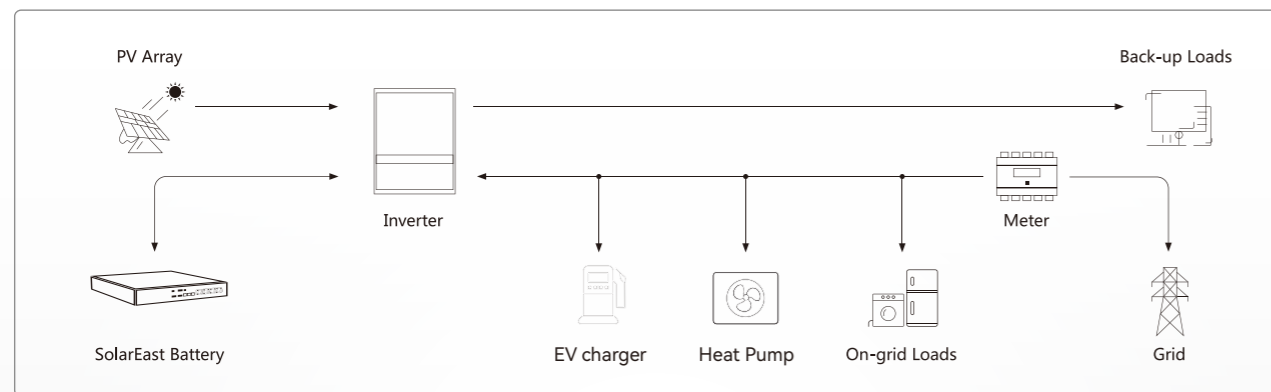
\* Please refer to the nameplate for product upgrades or changes in specifications without prior notice.

# 05 | INTEGRATED CLEAN ENERGY SOLUTION

## ▸ PV+ Energy Storage

### ▸ Features & Advantages

-  Backup energy storage
-  Easy installation
-  24/7 outage protection
-  Energy independence



## ▸ Recommended Configuration

### Option 1 On-Grid System



Model	Battery	Inverter	PV1	PV2
5kW	PowerCool-LFP-5000*2 pcs (10kWh)	PowerLink-5K-L1/A(5kW)	550W*10 pcs (5.5kWp)	410W*14 pcs (5.74kWp)
10kW	PowerCool-LFP-HV20 (20kWh)	PowerLink-10K-H3/A(10kW)	550W*20 pcs (11kWp)	410W*28 pcs (11.48kWp)

### Option 2 Off-Grid System



Model	Battery	Inverter	PV1	PV2
3kW	PowerCool-LFP-5000*1 pc (5kWh)	PowerLink-6KL1-OFF/R (6kW)	550W*6 pcs (3.3kWp)	410W*8 pcs (3.28kWp)
5kW	PowerCool-LFP-5000*2 pcs (10kWh)	PowerLink-6KL1-OFF/R (6kW)	550W*10 pcs (5.5kWp)	410W*14 pcs (5.74kWp)
10kW	PowerCool-LFP-5000*2 pcs (10kWh)	PowerLink-11KL1-OFF/R (11kW)	550W*18 pcs (9.9kWp)	410W*24 pcs (9.84kWp)

The final configuration is subject to adjustment based on the capacity and nature of the load, local radiation and other specific requirements of the end user.

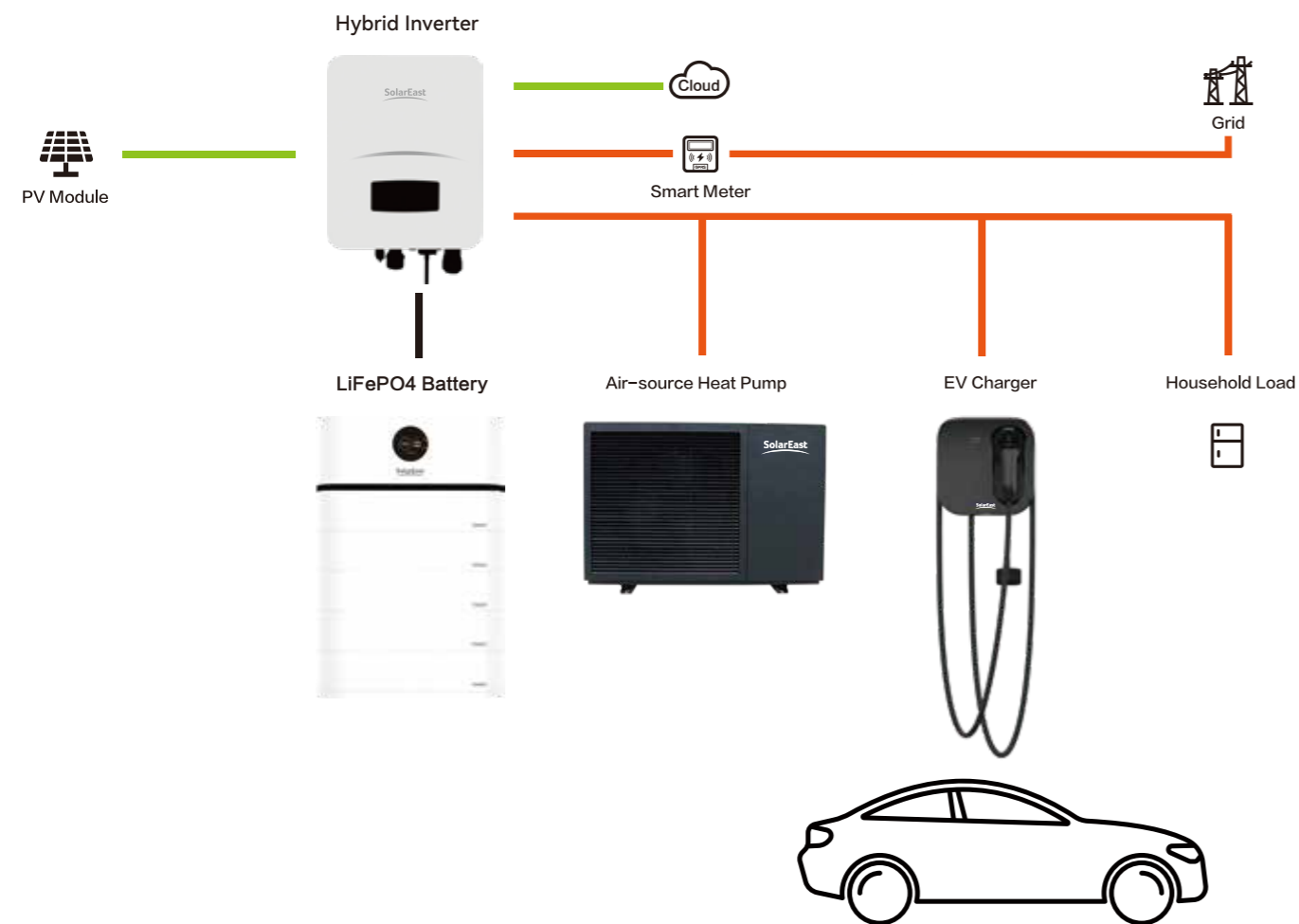


## › PV+Energy Storage+Heat Pump+EV Charger

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.



## 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





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



202MW Distributed PV Project (Phase I) of Guannan County, Jiangsu

## 07 | FLEXIBLE COOPERATION



**Regional Distributors**



**OEM/ODM**



**Integrated Solutions**