

EAST GROUP CO., LTD.

<https://en.eastups.com/>



✉ eastups@eastups.com
☎ +86 769 22898802
📍 No.6 Northern Industry Road, Songshan Lake Sci&Tech Industrial Park, Dongguan city, Guangdong, China (523808)

Global Digital Industry

and Smart Energy Integrated
Solutions Provider



Green Power
for You



Application

- Power Generation side
- Grid Side
- User Side

Energy Storage Solutions

- Public Utilities
- Requirement Response
- Industrial, Commercial, And Residential Energy Storage

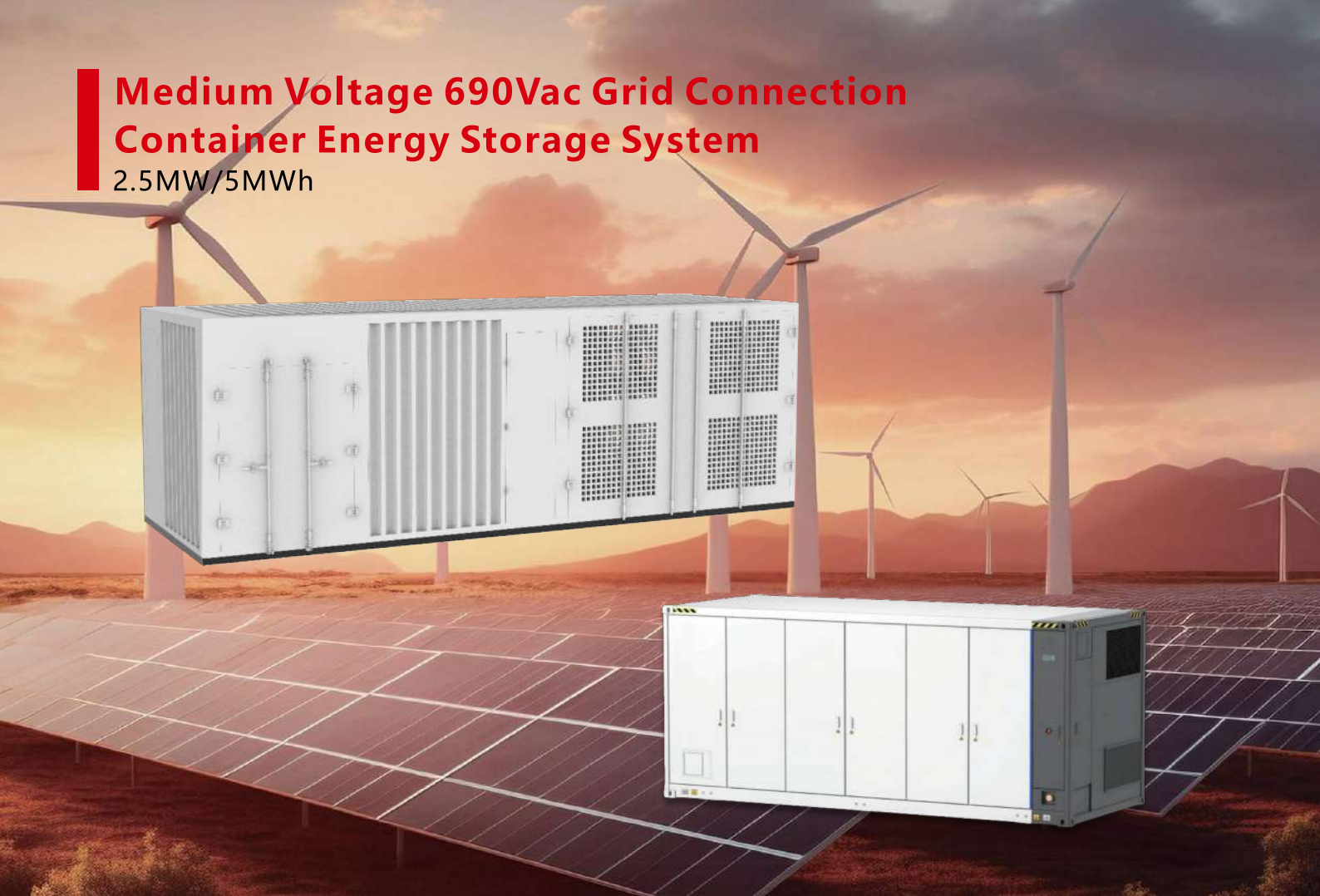
Company Introduction

East is engaging in 3 strategic business sectors covering smart power supply (UPS/EPS power supply, rail transit power supply, special power supply), data center (cloud computing data center, edge computing data center, IT infrastructure), smart energy (photovoltaic inverters and power generation systems, lithium batteries and energy storage systems, charging piles and systems, micro-grid network and smart distribution network), and is a provider of global digital industry and smart energy integrated solution.

EAST's products and solutions have been applied to power supply system of Qinghai-Tibet Railway, the first unmanned subway in US, Beijing S1 line, Daxing International Airport; data centers of Baidu, Tencent, Alibaba, IBM, Industrial and Commercial Bank of China, Construction Bank, Agricultural Bank of China, Bank of China; and EV charging system for G20 summit, Hong Kong-Zhuhai-Macao Bridge.

Contents


- 01** Medium Voltage 690Vac Grid Connection Container Energy Storage System
- 02** Low Voltage 400Vac Grid Connection Container Energy Storage System - Liquid Cooling
- 03** Diesel power generation photovoltaic power generation energy storage integrated solution
- 04** EAST-Meta 1000VC&I All-in-one Battery Energy Storage System
- 05** Single Phase Home Energy Solution
- 06** Three Phase Home Energy Solution
- 07** Single-Phase Residential Inverter
- 08** Three-Phase Residential Inverter
- 09** Off-Grid Inverter
- 10** Low Voltage Battery
- 11** High Voltage Battery
- 12** Communication Stick





Medium Voltage 690Vac Grid Connection Container Energy Storage System


2.5MW/5MWh


Product Advantages


- 

PACK Class IP67, box class IP55, C5 anti-corrosion, no fear of harsh environment
- 

Three-level topology, the maximum efficiency of 99%, better power quality
- 

Support side-to-back layout, the project area saved 40%+
- 


314Ah large cell design, reduce the cost of 16%+
- 


The whole machine system prefabricated cabin was delivered, shortening the construction period by 30%
- 

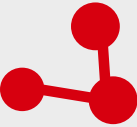
PACK 1P104S design, a 20-foot standard container


Product Application Scenarios

- New Energy
Distribution And Storage


- Fire-storage Combined
Frequency Modulation


- Shared Energy Storage


- Large Industry
And Commerce



Product specifications	2.5MW/5MWh Centralized energy storage system(liquid-cooled container)
Battery parameters	
Battery type	LFP3.2V314Ah
Voltage range	1040~1500V
Rated capacity	5015.9616kWh
System battery configuration	2P416Sx6
Approval standards	UN38.3, UL1973, UL9540A, IEC62620, IEC62619, UL1973, UN3536 UL9540A, IEC62619, EN61000, EN62477, IEC63056, IEC 62933-5-2, UL9540DNV Bankability, NFPA 72, NPFA 69, NFPA 70E, NFPA 855, HMA
The AC-side PCS parameters	
AC-side rated power	2500kW
AC-side voltage distortion rate	<3%
AC-side rated voltage	690Vac
Voltage range	586.5~759Vac
Power factor	>0.99
Reactive power is of an adjustable power range	-105%~105%
Voltage frequency	50Hz(46.5~51.5Hz)
Isolation method	Transformer isolation
Approval standards	IEC62109-1, IEC62109-1-2, IEC62477, IEC61000
Transformer parameters	
Power rating	2750kVA
Voltage ratio	(37+2x2.5%)kV/0.69kV
Group	Dy11
Approval standards	IEC 60076, IEC 62271
System parameter	
Converter booster integrated machine size(mm)	9087x2896x2438
Container size(mm)	6058x2896x2438
Weight of the converter booster machine(t)	20
Battery container weight(t)	40
IP rating	IP55(DC side), IP54(AC side)
Operating temperature range	-30~55℃
Operating humidity range	0-95%(no condensation)
Maximum work altitude	4000m
Battery temperature control mode	Liqukd cooling
Converter cooling mode	Intelligent air cooling
Fire protection system(shipping container)	Aerosol+water fire protection+explosion-proofan(combustiblegas)
Communication interfaces	CAN, RS485, Ethernet
External system communication protocol	ModbusTCP, IEC61850



Low Voltage 400Vac Grid Connection Container Energy Storage System - Liquid Cooling

EASS500-1000kW / 1-2MWh-C Series

Intelligent group series architecture, one cluster one management PCS three level topology, the whole machine energy conversion efficiency>90% liquid cooling temperature control, battery temperature difference <3°C, auxiliary power consumption is reduced by 30%, the system life is extended by 2 years

All in one Design, landing is grid connection, no debugging of high energy density cell, system area reduced by 40% no transformer design, lightweight high efficiency Allinone

Online monitoring of cloud platform, real-time warning of system faults support remote and local upgrade of key equipment, intelligent maintenance and high-precisionBMS, accurate calibration, and no expert on-site maintenance

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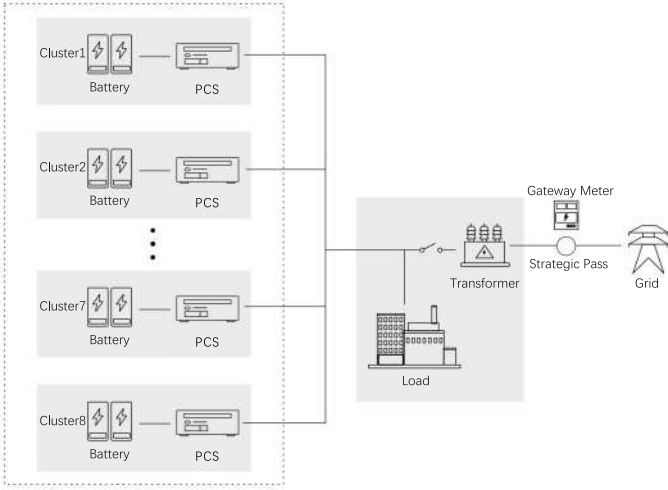
Product Application Scenarios

Shopping Mall Building

Industrial Park

Photovoltaic Storage And Charging Station

Public Construction Unit



System model	EASS500K/1MWH-C		EASS750K/1.5MWH-C		EASS1000K/2MWH-C	
DC side parameters						
Battery type	LFP3.2V300Ah					
Voltage range	739.2~950.4Vdc					
Rated capacity	1013kWh	1520kWh		2027kWh		
System battery configuration	264S1Px6					
Rated voltage	844.8Vdc					
Grid-connected AC-side parameters						
Power rating	500kW	750kW		1000kW		
Rated voltage	400Vac					
Rated frequency	50/60Hz					
Voltage range	400Vac(-20%~+15%)					
Frequency range	50/60Hz(-5Hz~+5Hz)					
Total current harmonic distortion rate	≤3%					
Power factor	98.50%					
Overload capacity	110%					
Off-grid AC-side parameters						
Power rating	500kW	750kW		1000kW		
Rated voltage	400Vac					
Rated frequency	50/60Hz					
Voltage harmonic	≤3%					
System parameter						
AC wiring mode	3/N/PE					
System effectiveness	≥85%					
Cooling-down method	Liquid Cooling					
Charge and discharge rate	0.5P					
Cycle index	≥6000@25℃					
Fire extinguisher system	Perfluorhexanone(PACK grade)+active monitoring+water fire protection					
Working temperature	-30~55℃					
Relative humidity	0~95%RH, with no condensation					
Above sea level	<3000(drop amount over 3000m)					
Communication interfaces	LAN, RS485, TCP/IP, ICE61850					
IP rating	IP54					
Weight(kg)	≤35000					
Cabinet size(mm)	6058×2438×2896					
Approval standards	UL9540A-2023, IEC 62619-2022, IEC 63056-2020, IEC/EN 62477-1-2023, IEC62933-1-2024, UL1973-2022, UN38.3, UL1973-2022, IEC 61000-6-2-2016, IEC 61000-6-4-2018, EN 50549-2/-10, VDE 4110, VDE 4120, C10/11, CEI016					

Diesel Power Generation Photovoltaic Power Generation

Energy Storage Integrated Solution

EASS 100K-200KWH-C / EASS 250K-0.5MWH-C / EASS 500K-1MWH-C



Product Advantages

- Fuel saving and efficiency increase, which can fully mobilize the synergistic effect of energy storage and diesel units, and improve the fuel efficiency of diesel units.
- High waterproof and dustproof design, to adapt to different environmental needs. Vehicle battery design, perfect fire protection, protection and monitoring system.
- Factory prefabrication, easy installation and maintenance on site. Support for frequent movement and forklift transportation to accommodate mobile applications scenarios.
- The operation mode, such as hybrid mode, grid-connected mode, off-grid mode storage-storage mode and other operation modes, realizes the mains, photovoltaic energy storage and generator access at the same time, and each mode can be seamlessly switched freely to provide stable electric energy for the load.

Product Application Scenarios



System model	EASS 100K/200KWH-C	EASS 250K/0.5MWH-C	EASS 500K/1MWH-C
DC side parameters			
Battery type	LFP 3.2V314Ah	LFP 3.2V300Ah	
Voltage range	560~720Vdc	616~792Vdc	
Rated capacity	200.96kwh	663kWh	1105kWh
Batteries cluster into groups	200S1P	220S1Px3	220S1Px5
Rated voltage	640Vdc	704Vdc	
Pv input parameters			
Maximum PV inputvoltage	1000V		
Maximum photovoltaic power	120/180/240kW	300/360kW	600/660/720kW
Number of MPPT modules	2/3/4	5/6	10/11/12
Voltage range	250~840Vdc		
Full voltage range	450~850Vdc		
Off-grid AC side parameters			
Power rating	100kW	250kW	500kW
Rated voltage	400Vac		
Rated frequency	50/60Hz		
Voltage range	400Vac(-20%~+15%)		
Frequency range	50/60Hz(-5Hz~+5Hz)		
Isolation transformer	270/400	270/400	315/400
Overload capacity	110%		
System parameter			
AC wiring mode	3/N/PE		
System effectiveness	≥85%		
Cooling-down method	The air is cold	liqukd cooling	
Charge and discharge rate	0.5P		
Cycle index	≥ 6000@25℃		
Fire extinguisher system	Perfluorohexone+active monitoring+water fire protection		
Working temperature	20~55℃		
Relative humidity	0~95% RH, with no condensation		
Above sea level	<3000(over 3000m)		
Communication interfaces	LAN, RS485, TCP/IP, ICE61850		
IP rating	IP54		
Weight(kg)	≤10000	≤35000	
Cabinet size(mm)	3500×2438×2590	6058×2438×2896	

EAST-Meta 1000VC&I

All-in-one Battery Energy Storage System

EAPCS100K / 215kWh



Product Advantages

- The maximum efficiency of the system can reach 90%
- The temperature difference of the battery cell is less than 4°C
- PCS, battery, local EMS, temperature control and fire protection system integrated in a single cabinet for 1% reduction in losses
- The protection level of the whole cabinet is IP54, the core module is IP65, and the maximum anti-corrosion level can reach C5
- It has flexible configurations for parallel expansion of multiple products

Product Application Scenarios

New Energy
Distribution And Storage

Fire-storage Combined
Frequency Modulation

Shared Energy Storage

Large Industry
And Commerce

Product model		EASS125K/261kWh-C
DC side parameters		
Battery type	LFP 3.2V/280Ah	
Voltage range	(648~864)Vde	
Rated capacity	215kWh	
System battery configuration	240S1P	
Rated voltage	768Vdc	
AC side parameters		
Power rating	100kW	
Rated voltage	400Vac	
Rated frequency	50Hz	
Voltage range	400Vac(-10%~10%)	
Frequency range	45~55(Hz)	
Total current harmonic distortion rate	<3%(Rated Power)	
DC component	<0.5%(Rated Power)	
Power factor	>0.99(Rated Power)	
Overload capacity	110%	
Adjustable reactive power factor range	-105%~105%	
Isolation Method	Non-isolated	
System parameters		
AC wiring mode	Three phase four line	
Max. Efficiency(PCS)	>98.5%	
Dimensions(WxHxD)(mm)	1400x2300x1560	
Weight(kg)	2700	
IP rating	IP54	
Operating temperature range	-30°C ~50°C	
Operating humidity range	0%~95%(No Condensation)	
Max. operating altitude without derating	≤2000m	
Battery cooling method	Smart Fan	
Fire protection system	Aerosol, Water Firefighting	
Communication interfaces	Ethernet	
External system communication protocol	Modbus-TCP	
Approval standards	IEC/EN 62477-1-2012, IEC 61000-6-2/IEC 61000-6-4, UN 38.5/EN 50549-1:2019/AC 2019	

EAST-Meta 1000VC&I

All-in-one Battery Energy Storage System

EASS125kW / 261kWh-C



Intelligent group series architecture, one cluster one management PCS three level topology, the whole machine energy conversion efficiency>90% liquid cooling temperature control, battery temperature difference <3 °C,auxiliary power consumption is reduced by 30%, the system life is extended by 2 years

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Product Application Scenarios



Shopping Mall Building



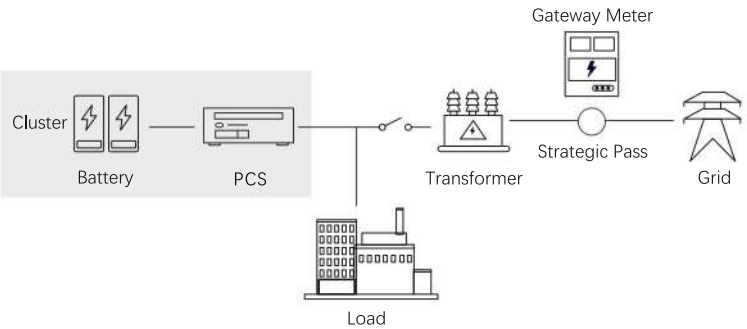
Industrial Park



Photovoltaic Storage And Charging Station



Public Construction Unit



System model	EASS125K/261kWh-C
DC side parameters	
Battery type	LFP3.2V314Ah
Voltage range	728~936Vdc
Rated capacity	261kWh
Batteries cluster into groups	260S1P
Rated voltage	832Vdc
Grid-connected AC-side parameters	
Power rating	125kW
Rated voltage	400Vac
Rated frequency	50/60Hz
Voltage range	400Vac(-20%~+15%)
Frequency range	50/60Hz(-5Hz~+5Hz)
Total current harmonic distortion rate	≤3%
Power factor	98.50%
Overload capacity	110%
Off-grid AC-side parameters	
Rated power	125kW
Rated voltage	400Vac
Rated frequency	50/60Hz
Voltage harmonic	≤3%
System parameter	
AC wiring mode	Three phase four line
System efficiency	≥98.5%
Cooling-down method	Liquid Cooling
Charge and discharge rate	0.5P
Cycles	≥6000@25℃
Fire protection system	Perfluorohexanone(PACK grade)+active monitoring+water fire protection
Operating temperature	-30~55℃
Relative humidity	0~95%RH, no condensation
Elevation	<3000m(drop over 3000m)
Communication interfaces	LAN, RS485, TCP/IP, ICE61850
IP rating	Battery protection@IP67, PCS protection@IP66, system protection@IP54
Weight(kg)	≤2200
Cabinet size(mm)	1000×1350×2350
Approval standards	UL9540A-2023, IEC 62619-2022, IEC 63056-2020, IEC/EN 62477-1-2023, IEC62933-1-2024, UL1973-2022, UN38.3, UL1973-2022, IEC 61000-6-2-2016, IEC 61000-6-4-2018, EN 50549-2/-10, VDE 4110, VDE 4120, C10/11, CEI016

Single-Phase Home Energy Solution

All in one

EAHI6KSL Series



Integrated streamlined case design with elegant appearance

IP66 stainless steel enclosure, waterproof and dustproof

Flexible expansion of battery capacity

Module plug-and-play, automatic recognition

Stacking design for easy installation

Security and stability, 24-hour intelligent monitoring

Seamless switching of emergency mode to ensure that loads do not power down

Flexible setting of multiple working modes according to preferences

System Specification

EAHI6KSL Series						
System components						
Number of battery modules	1	2	3	4	5	6
Battery capacity	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh
Battery system model	5KWH					
Number of inverter	1					
Inverter mode	EAHI-6000-SL-S					
Rated power	6000W					
Dimensions(WxHxD)(mm)	600x778x305	600x998x305	600x1218x305	600x1438x305	600x1658x305	600x1878x305
Weight(kg)	93	143	193	243	293	343
Noise level at 1 m	<25dB					
Cooling type	Natural cooling					
Maximum altitude	4000m					
Operating temperature	-20℃~+58℃					
Operating humidity	0~100%RH(Non-condensing)					
Display	LED and app					
Installation method	Floor-mounted					

Lithium-ion Battery Module

Battery Model	5KWH
Cell technology	LiFePO4
Energy capacity	5.12kWh
Maximum expandable number	6
Scalable capacity range	5.12kWh~30.72kWh
DOD	Max. 100% DOD(settable)
Maximum charging power	3.84KW
Maximum discharging power	5.02KW
Max. charging current	75A
Max. discharge current	98A
Operating temperature	-20~+58℃
Humidity	0~100%RH(Non-condensing)
Communication interface	485 and CAN
Connection method	Floor-mounted
IP rating	IP66
Certification	IEC 62619, IEC 60730, UN 38.3, IEC 62040-1, ROHS2.0, VDE 2510-50

Hybrid Inverter Specification

INVERTER MODEL	EAHI-6000-SL-S
PV input parameter	
Maximum input power	8000W
Maximum input voltage	550Vdc
Rated input voltage	360Vdc
Starting voltage	100Vdc
Minimum operating voltage	150Vdc
MPPT operating voltage	100~540Vdc
PV maximum input current	16A/16A
PV maximum short circuit current	24A/24A
Quantity of independent MPPT	2
Number of input strings per MPPT	1/1
Battery input parameter	
Battery type	Lithium battery
Battery voltage range	42~58Vdc
Maximum charging current	100A
Maximum discharge current	120A
Charging curve	3 Stages/Equalization
Lithium battery charging strategy	BMS self-adaption
AC input parameter (grid side)	
Grid type	Single phase
Input voltage range	184~276Vac
Input frequency range	50±5Hz/60±5Hz
Maximum input current	40A
AC output parameter (grid side)	
Rated output power	6000W
Maximum apparent output power	6000VA
Grid system mode	1/N/PE
Rated output voltage	220Vac/230Vac
Rated output frequency	50Hz/60Hz
Rated output current	27.3A/26.1A
Maximum output current	27.3A
Power factor	>0.99(0.8 lead~0.8 lag)
Total current harmonics	≤3%(rated power)
AC output parameter (back-up side)	
Rated output power	6000W
Maximum apparent output power	6000VA
Grid system mode	1/N/PE
Rated output voltage	230Vac(208/220/240Vac settable)
Rated output frequency	50Hz/60Hz
Rated output current	27.3A/26.1A
Voltage harmonic	≤3% (linear load)
Switching time	≤10ms
Efficiency	
Maximum efficiency	97.8%
MPPT efficiency	99.9%
Protection	
Comprehensive	Grid over-voltage protection, grid over-frequency protection, grid overload protection, over-temperature protection, anti-islanding protection, insulation resistance detection, residual current monitoring unit, output over-current protection, output short-circuit protection, surge protection
Surge protection	DC Type II/AC Type III
Standard	
Safety regulation	IEC/EN 62109-1/-2, AS62109
EMC	EN 61000-6-1/-2/-3/-4
Grid-tied	CEI 0-21, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018, NRS097-2-1, EN 50549-1 G99/1-9:2022, ETSI EN303645+PSTI, C10/11:2021, XP C 15-712-3:2019, ELOT EN 50549-1:2019, PEA
Other	
Topology	High frequency isolation(to batteries)
IP rating	IP66
Operating temperature range	-25~60℃(derated at >45℃)
Cooling method	Natural cooling
Maximum altitude	4000m
Noise level at 1 m	≤25dB
Installation method	Floor-mounted
Dimensions(WxHxD)(mm)	600×530×305
Weight(kg)	36.4



System Specification

EAHI10K/15K/20KTH Series				
System component				
Number of battery modules	1	2	3	4
Battery capacity	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Battery system model	EHBS-P5-TH			
Number of inverter	3			
Inverter mode	EAHI10K/15K/20KTH-S(optional)			
Rated power	10K/15K/20kW(optional)			
Dimensions(WxHxD)(mm)	650x1250x270	650x1600x270	650x1950x270	650x2300x270
Weight(kg)	120	175	230	285
Noise	≤25dB@EAHI10K, ≤45dB@EAHI15K, ≤50dB@EAHI20K			
Cooling type	Smart cooling			
Maximum altitude	3000m			
Operating temperature	-20℃ ~ +58℃			
Operating humidity	0~100%RH(Non-condensing)			
Display	LED and app			
Installation method	Floor-mounted			

Battery Specification

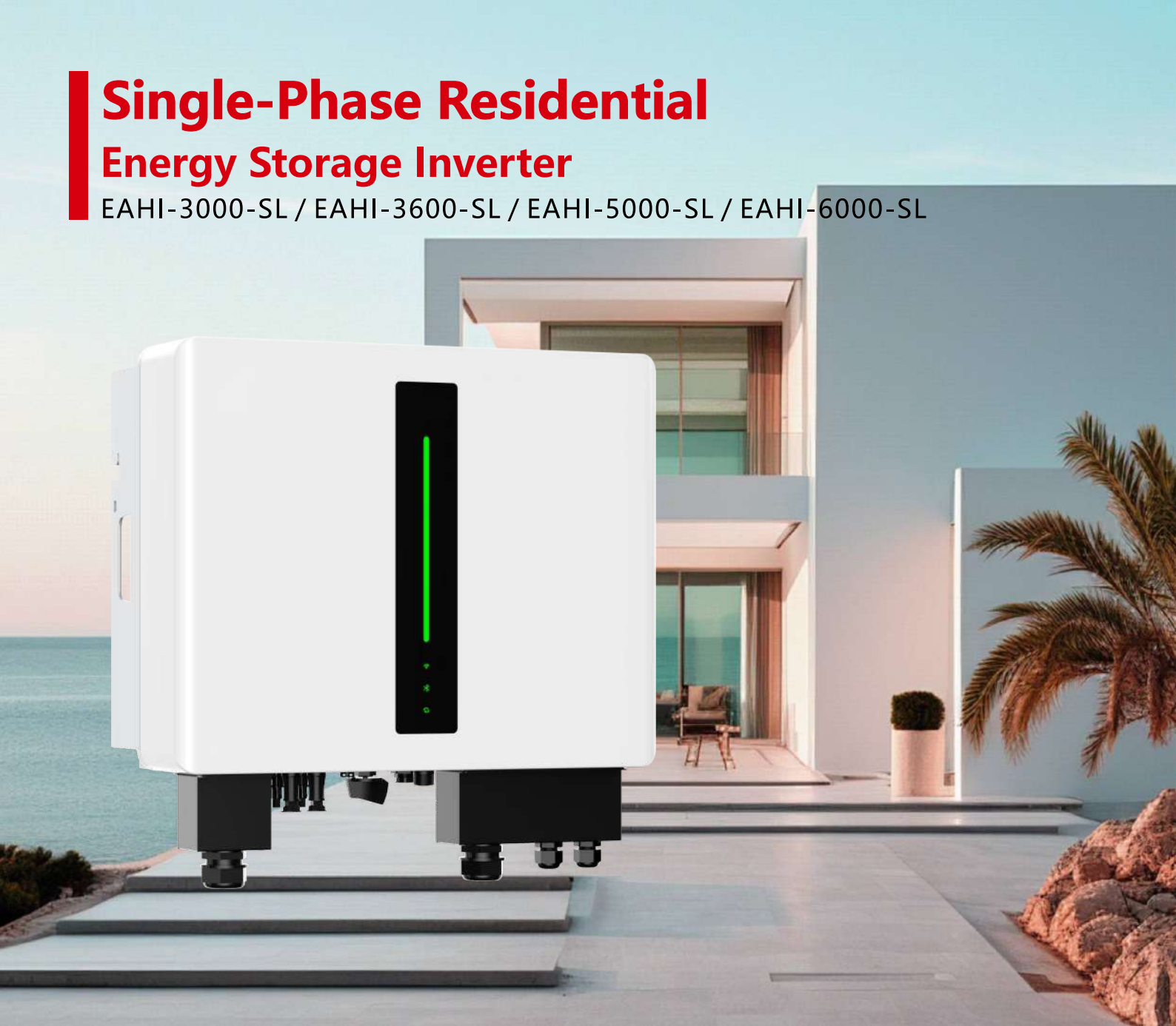
MODEL	EHBS-P5-TH
System component	
Battery type	LiFePO4
Module capacity	5.12kWh
Rated voltage	750Vdc
Voltage range	600~1000Vdc
Max. charge/discharge current	3.4A/5.5A
Communication interfaces	CAN/RS485
Dimensions(WxHxD)(mm)	650x370x270
Net weight	59
Topology	High frequency isolation
IP rating	IP66
Operating temperature	-25℃~ +55℃
Cooling mode/Heating mode	Natural cooling/PTC heating
Altitude	3000m
Noise level at 1 m	< 40dB
Installation method	Floor-mounted
Standards	
Safety regulation	IEC/EN 62619 2022, ISO 13849, IEC/EN 62040-1, IEC/EN 62477, IEC62109-1/2
EMC	IEC 61000-6-1, EN/IEC 61000-6-3
Transportation	UN 38.3

Hybrid Inverter Specification

MODEL	EAHI10KTH-S		EAHI15KTH-S		EAHI20KTH-S	
PV input parameter						
Max. input power	20kW		30kW		30kW	
Max. input voltage			1000Vdc			
Rated input voltage			650Vdc			
Start-up voltage			180Vdc			
Min. operating voltage			160Vdc			
MPPT voltage range			160~950Vdc			
Full power MPPT voltage range			625~800V			
Max. input current per MPPT	16A/16A				16A/32A	
Max. short circuit current per MPPT	24A/24A				24A/48A	
Number of MPPTs			2			
Number of input strings per MPPT	1/1				1/2	
Battery input parameter						
Battery type			Lithium battery			
Voltage range			650~980Vdc			
Max. charge/discharge current	15.4A/15.4A		23.1A/23.1A		30.8A/30.8A	
AC input and output (grid)						
Max. apparent power of grid	15kVA		22.5kVA		30kVA	
Max. input current	21.7A		32.6A		40A	
Input voltage range			320~480Vac			
Input frequency range			50±5Hz/60±5Hz			
Rated output power	10kW		15kW		20kW	
Max. apparent output power	11kVA		16.5kVA		22kVA	
Rated output voltage			3/N/PE, 380Vac/400Vac			
Rated output frequency			50 Hz/60Hz			
Rated output current	15.2A/14.5A		22.8A/21.7A		30.4A/29.0A	
Max. output current	16.7A/15.8A		25.1A/23.8A		33.5A/31.8A	
Power factor			>0.99(0.8 leading~0.8 lagging)			
THDI			≤3%(@ rated power)			
Generator input						
Max. input power	10kW		15kW		20kW	
Max. input current	15.2A		22.8A		30.4A	
AC output parameter (back-up load)						
Rated output power	10kW		15kW		20kW	
Max. apparent power	10kVA		15kVA		20kVA	
Rated output voltage			3/N/PE, 380Vac/400Vac			
Rated output frequency			50Hz/60Hz			
Rated output current	15.2A/14.5A		22.8A/21.7A		30.4A/29.0A	
Max. output current	15.2A		22.8A		30.4A	
THDV			≤3%(linear load)			
Switching time			≤10ms			
Efficiency						
Max. efficiency			98.2%			
MPPT efficiency			99.9%			
Others						
Protections	Over/under voltage, over/under-frequency, over load, output short-circuit, over temperature, residual current monitoring unit, output over-current,insulation resistance, anti-islanding, surge protection					
Surge protection	DC Type II/AC Type III					
Dimensions(WxHxD)(mm)	650x640x270mm					
Net weight(kg)	45					
Parallel operation	Supports 6 units in parallel connection					
Topology	Non-isolated					
IP rating	IP66					
Operating temperature	-25°C~+60°C					
Cooling mode	Natural cooling		Smart cooling			
Altitude	3000m					
Noise level at 1m	≤25dB		≤45dB		≤50dB	
Standards						
Grid connection	NC RFG+PTPIREE, VDE 0126, EN50549-1/10, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018, PPDS, CEI 0-21					
EMC	IEC/EN 62109-1/-2, IEC62040-1, IEC62477, IEC62619:2022, EN 61000-6-1/-2/-3/-4					
Battery Distribution Box Specification						
MODEL			PDU-SH-Y/PDU-SH-F			
Parameter						
Maximum current	60A					
Voltage range	300~1000Vdc					
Display method	LED					
Dimensions(WxHxD)(mm)	650x150x270					
Net weight(kg)	12					
IP rating	IP66					
Others						
Fixed base size(WxHxD)(mm)	650x80x270					

Single-Phase Residential Energy Storage Inverter

EAHI-3000-SL / EAHI-3600-SL / EAHI-5000-SL / EAHI-6000-SL



IP66 all-aluminum chassis, adaptable to outdoor environment



High charge/discharge efficiency, compatible with lithium battery and lead-acid battery



Flexibly settable charge/discharge time section and power, peak load shaving



APP real time monitoring, easy maintenance



Outstanding off-grid output performance, adaptable to various non-linear load

Hybrid Inverter Specification

MODEL	EAHI-3000-SL		EAHI-3600-SL		EAHI-5000-SL		EAHI-6000-SL	
PV input parameter								
Max. input power	4680W				6500W		7800W	
Max. input voltage	550Vdc							
Rated input voltage	360Vdc							
Start-up voltage	100Vdc							
Min. operating voltage	150Vdc							
MPPT voltage range	100~540Vdc							
Max. input current per MPPT	16A				16A/16A			
Max. short-circuit current per MPPT	24A				24A/24A			
Number of MPPT	1				2			
Number of input strings per MPPT	1				1/1			
Battery input parameter								
Battery type	Li-ion, Lead-acid battery							
Voltage range	42~58Vdc							
Max. charge current	66A	75A			100A		100A	
Max. discharge current	66A	75A			100A		120A	
Charging curve	3 Stages/Equalization							
Lithium battery charging strategy	BMS self-adaption							
AC input parameter(grid)								
Grid type	Single phase(L/N/PE)							
Input voltage range	184~276Vac							
Input frequency range	50±5Hz/60±5Hz							
Max. input current	21.8A	26.2A			36.5A		40A	
AC output parameter(grid)								
Rated output power	3000W	3600W			5000W		6000W	
Max. apparent output power	3000VA	3600VA			5000VA		6000VA	
Grid system mode	Single phase(L+N+PE)							
Rated output voltage	220Vac/230Vac							
Rated output frequency	50Hz/60Hz							
Rated output current	13.6A/13.0A	16.4A/15.7A			22.7A/21.8A		27.3A/26.1A	
Max. output current	13.6A	16.4A			22.7A		27.3A	
Power factor	>0.99(0.8 leading~0.8 lagging)							
THDI	≤3%(@Rated Power)							
AC output parameter(back-up)								
Rated output power	3000W	3600W			5000W		6000W	
Max. apparent power	3000VA	3600VA			5000VA		6000W	
Output system mode	Single phase(L+N+PE)							
Rated output voltage	230Vac(208/220/240Vac settable)							
Rated output frequency	50Hz/60Hz							
Rated output current	13.0A	15.7A			21.8A		26.1A	
Max. output current	14.4A	17.3A			24.0A		28.8A	
THDV	≤3%(linear load)							
Transfer time	≤10ms							
Efficiency								
Max. efficiency	97.8%							
MPPT efficiency	99.9%							
Protections								
Protections	Over/under voltage, over/under-frequency, over load, output short-circuit, over temperature, residual current monitoring unit, output over-current, insulation resistance, anti islanding, surge protection							
Output overvoltage protection	DC Type II/AC Type III							
Others								
Communications	RS485, WIFI							
Dimensions(WxHxD)(mm)	548x440x197							
Net weight(kg)	21.4				24.8			
Topology	High frequency isolation(for battery)							
IP rating	IP66							
Operating temperature	-25°C~+60°C(>45°C derating)							
Cooling mode	Natural cooling							
Altitude	4000m							
Noise level at 1 m	≤25dB							
Installation mode	Wall-mounted							
Standards								
Safety regulation	IEC/EN 62109-1/-2, AS62109							
EMC	EN 61000-6-1/-2/-3/-4							
Grid connection	CEI 0-21, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018, AS4777.2, NRS097-2-1, EN 50549-1							

Single-Phase Residential Energy Storage Inverter

EAHI10KSL / EAHI12KSL



Supports PV inverter, generators, and microgrid inputs, suitable for new and modified photovoltaic and microgrid systems



Support RSD and AFCI optional configurations to provide safer protection for the system



App real-time monitoring, supports online remote OTA upgrades, easy operation and maintenance



Supports multiple inverters with EPS output in parallel, and can be expanded to small industrial and commercial applications



Mains and PV input power oversized at a ratio of 1.5, resulting in a more stable system operation

Hybrid Inverter Specification

MODEL	EAHI10KSL	EAHI12KSL
PV input parameter		
Max. input power	18kW	18kW
Max. open-circuit voltage	550Vdc	
Rated input voltage	360Vdc	
Start-up voltage	150Vdc	
Min. operating voltage	100Vdc	
MPPT voltage range	100~540Vdc	
Full power MPPT voltage range	300~500V	
Max. input current per MPPT	30A/30A	
Max. short-circuit current per MPPT	40A/40A	
MPPT quantity	2	
Number of input strings per MPPT	2/2	
Battery input parameter		
Battery type	Li-ion battery/Lead acid battery	
Voltage range	42~58Vdc	
Max. charge/discharge current	180A/180A	250A/250A
AC input and output parameter(grid)		
Max. apparent power of grid	15kVA	18kVA
Max. input current	68.2A	81.8A
Input voltage range	184~276Vac	
Input frequency range	50±5Hz	
Rated output power	10kW	12kW
Max. output apparent power	10kVA	12kVA
Rated output voltage	1/N/PE, 220Vac/230Vac	
Rated output frequency	50Hz	
Rated output current	45.5A/43.5A	54.5A/52.2A
Max. output current	45.5A	54.5A
Power factor	>0.99(0.8 leading~0.8 lagging)	
THDI	≤3%(@ rated power)	
Generator input		
Max. input power	10kW	12kW
Max. input current	45.5A	54.5A
AC output parameter(back-up)		
Rated output power	10kW	12kW
Max. apparent power	10kVA	12kVA
Rated output voltage	1/N/PE, 220Vac/230Vac	
Rated output frequency	50Hz	
Rated output current	45.5A/43.5A	54.5A/52.2A
Max. output current	45.5A	54.5A
THDV	≤3%(linear load)	
Switching time	≤20ms	
Efficiency		
Maximum efficiency	97.8%	
MPPT efficiency	99.9%	
Protections		
Protections	Over/under voltage, over/under-frequency, overload, output short-circuit, over temperature, residual current monitoring unit, output over-current, insulation resistance detection, anti-islanding, surge protection	
Surge protection	DC Type II/AC Type II	
Others		
Dimensions(WxHxD)(mm)	450x600x270	
Weight(kg)	45	
Topology	High frequency isolation(for battery)	
IP rating	IP66	
Operating temperature	-25°C~+60°C	
Cooling mode	Smart cooling	
Altitude	3000m	
Noise level(1m)	≤55dB	
Installation method	Wall-mounted	
Standards		
Safety regulation	IEC/EN 62109-1/-2, AS62109	
EMC	EN 61000-6-1/-2/-3/-4	
Grid connection	NRS097-2-1:2017	

Three-Phase Residential Energy Storage Inverter

EAHI10KTH / EAHI15KTH / EAHI20KTH



Supports PV inverter, generators, and microgrid inputs, suitable for new and modified photovoltaic and microgrid systems



App real-time monitoring, supports online remote OTA upgrades, easy operation and maintenance



Supports multiple inverters with EPS output in parallel, and can be expanded to small industrial and commercial applications



Mains and PV input power oversized at a ratio of 1.5, resulting in a more stable system operation







Support RSD and AFCI optional configurations to provide safer protection for the system

Hybrid Inverter Specification






MODEL	EAHI10KTH		EAHI15KTH		EAHI20KTH	
PV input parameter						
Max. input power	20kW		30kW		30kW	
Max. input voltage			1000Vdc			
Rated input voltage			650Vdc			
Start-up voltage			180Vdc			
Min. operating voltage			160Vdc			
MPPT voltage range			160~950Vdc			
Full power MPPT voltage range			625~800V			
Max. input current per MPPT	16A/16A				16A/32A	
Max. short-circuit current per MPPT	24A/24A				24A/48A	
Number of MPPTs			2			
Number of input strings per MPPT	1/1				1/2	
Battery input parameter						
Battery type			Lithium battery			
Voltage range			150~600Vdc			
Max. charge/discharge current	25A/25A				50A/50A	
AC input and output parameter(grid)						
Max. apparent power of grid	15kVA		22.5kVA		30kVA	
Max. input current	22.8A		34.2A		40.0A	
Input voltage range			320~480Vac			
Input frequency range			50±5Hz/60±5Hz			
Rated output power	10kW		15kW		20kW	
Max. output apparent power	11kVA		16.5kVA		22kVA	
Rated output voltage			3/N/PE, 380Vac/400Vac			
Rated output frequency			50 Hz/60Hz			
Rated output current	15.2A/14.5A		22.8A/21.7A		30.4A/29.0A	
Max. output current	16.7A/15.8A		25.1A/23.8A		33.5A/31.8A	
Power factor			>0.99(0.8 leading~0.8 lagging)			
THDI			≤3%(@ rated power)			
Generator input						
Max. input power	10kW		15kW		20kW	
Max. input current	15.2A		22.8A		30.4A	
AC output parameter(back-up)						
Rated output power	10kW		15kW		20kW	
Max. apparent power	10kVA		15kVA		20kVA	
Rated output voltage			3/N/PE, 380Vac/400Vac			
Rated output frequency			50Hz/60Hz			
Rated output current	15.2A/14.5A		22.8A/21.7A		30.4A/29.0A	
Max. output current	15.2A		22.8A		30.4A	
THDV			≤3%(linear load)			
Switching time			≤10ms			
Efficiency						
Maximum efficiency			98.2%			
MPPT efficiency			99.9%			
Protections						
Protections	Over/under voltage, over/under frequency, overload, output short-circuit, over-temperature, residual current monitoring unit, output overcurrent, insulation resistance detection, anti-islanding, surge protection					
Surge protection	DC Type II/AC Type III					
Others						
Dimensions(WxHxD)(mm)	500x660x270					
Packaged dimensions(WxHxD)(mm)	510x860x370					
Net weight(kg)	41					
Gross weight(kg)	47					
Parallel operation	Supports 6 units in parallel connection					
Topology	Non-isolated					
IP rating	IP66					
Operating temperature	-25°C~+60°C					
Cooling mode	Natural cooling		Smart cooling			
Altitude	3000m					
Noise level(1m)	≤25dB		≤45dB		≤50dB	
Installation method	Wall-mounted					
Standards						
Grid connection	VDE 0126, EN50549, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018					
Safety regulation	IEC/EN 62109-1/-2					
EMC	EN 61000-6-1/-2/-3/-4					

Off-Grid Inverter

GF3K24H / GF5K48H / GF5K48L

-  Battery-free operation available, loads are powered directly by solar and AC grid
-  Graphical LCD and keypad design, user-friendly operation interface
-  Real time remote monitoring system via WiFi module easy operation and maintenance
-  Excellent output performance, suitable for all kinds of non-linear loads



-  Elegant appearance, wall-mounted design, simplified installation
-  Pure sine wave output, output power factor 1.0
-  Intelligent battery charger design, optimizable battery performance, with high efficiency charging/discharging technology
-  High PV input range of 120V~450Vdc
-  Configurable AC grid/battery input priority


Inverter Specification

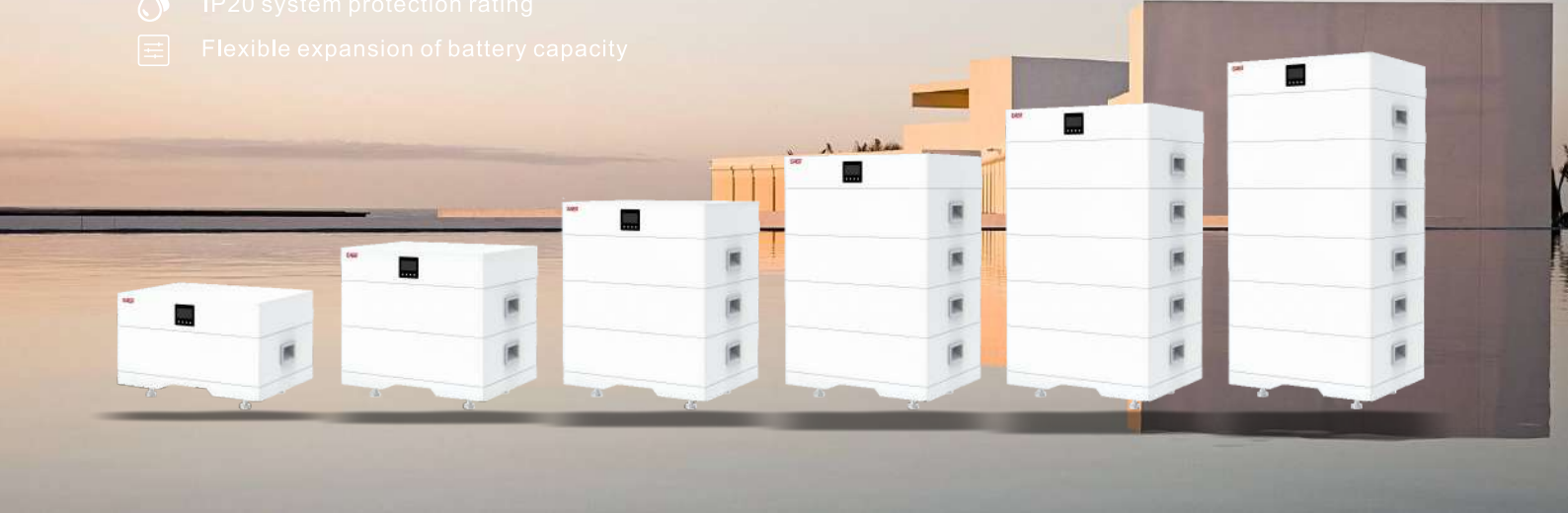
MODEL	GF3K24H	GF5K48H	GF5K48L
Rated power	3000VA/3000W	5000VA/5000W	5000VA/5000W
AC input			
Rated input voltage	230VAC	230VAC	120VAC
Input voltage range	170~280VAC PC 90~280VAC home application	170~280VAC PC 90~280VAC home application	90~140VAC
Rated input frequency	50/60Hz self-adapting	50/60Hz self-adapting	50/60Hz self-adapting
Input frequency range	40~65Hz	40~65Hz	40~65Hz
Rated input current	20A	32A	61.33A
Max. input current	30A	40A	80A
AC output			
Rated AC output voltage	230VAC±5%	230VAC±5%	120VAC±5%
Output setttable voltage	220V/230V/240V	220V/230V/240V	110V/120V
Output setttable frequency	50Hz/60Hz		
Rated AC output current	13.05A	21.70A	41.67A
Overload capacity	10s@110%~150% rated load; 5s@≥150% rated load;100ms@≥200% rated load		
THDU	<5%, linear load; <10%, non-linear load		
Efficiency(peak value)	93%		
Surge power	6000VA, 5 cycles	10000VA, 5 cycles	
Switching time	20ms home application	10ms	
Battery			
Battery type	Lead-acid battery/lithium battery		
Rated voltage	24VDC	48VDC	
Charging voltage	27VDC(default), 24~29.2VDC setttable	54VDC(default), 48~58.4VDC setttable	
Overcharge protection voltage	30.2VDC	60.5VDC	
Rated discharge current	142A	113.7A	
PV/AC charging			
PV charging	MPPT		
Max. PV plate power	4000W	6000W	
Max. PV plate open circuit voltage	450VDC		
MPPT operation range voltage	120~430VDC		
Max. PV input current	18A	27A	
Max. PV charging current	100A		
Max. AC charging current	100A		
Max. battery charging current	100A		
Others			
Dimension(WxDxH)(mm)	322x122x471	342x122x471	328x120x415
Net weight(kg)	10	11	11
Operating environment	-10℃~50℃		
IP rating	IP20		
Protections	Input over/under voltage protection, input over/under frequency protection, output overload, output short-circuit, radiator over-temperature protection, fan fault detection etc.		
Communication interfaces	USB/RS232/RS485, dry contact, WiFi(optional)		

Single-Phase Off-gird Energy Solution

All in one

GF5KSL Series

-  Stacking design for easy installation
-  Module plug-and-play, automatic recognition
-  IP20 system protection rating
-  Flexible expansion of battery capacity



Lithium-ion Battery Module

Battery Model		5KWH
General		
Cell technology	LiFePO4	
Energy capacity	5.12kWh	
Maximum expandable number	6	
Scalable capacity range	5.12kWh~30.72kWh	
Maximum charging power	3.84kW	
Maximum discharging power	5.02kW	
Max. charging current	50A	
Max. discharge current	100A	
Operating temperature	-20~+65℃	
Humidity	5~95%RH(Non-condensing)	
Communication interface	485 and CAN	
Connection method	Floor-mounted	
IP rating	IP20	
Certification	IEC62619, IEC 60730, UN38.3, IEC 62040-1, ROHS2.0, VDE 25010-50	

System Components						
Model	GF5KSL Series					
Number of battery module	1	2	3	4	5	6
Battery capacity	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.60kWh	30.72kWh
Battery system model	5kWH					
Number of inverter	1					
Inverter model	GF5K48H-S					
Rated power	5000W					
Dimension(WxDxH)(mm)	600x450x340	600x450x510	600x450x680	600x450x850	600x450x1020	600x450x1190
Net weight(kg)	70	120	170	220	270	320
Cooling type	Fan cooling					
Maximum altitude	4000m(Altitude: < 1000 m, above 1000m, derating 1% for each additional 100m)					
Operating temperature	-10℃~+50℃					
Operating humidity	5%~95%RH(Non-condensing)					
Display	LCD					
Installation method	Floor-mounted					

Inverter Specification

MODEL	GF5K48H-S
Rated power	5000VA/5000W
AC input	
Rated input voltage	230VAC
Input voltage range	170~280VAC PC 90~280VAC home application
Rated input frequency	50/60Hz self-adapting
Input frequency range	40~65Hz
Rated input current	32A
Max. input current	40A
AC output	
Rated AC output voltage	230VAC±5%
Output settable voltage	220V/230V/240V
Output settable frequency	50Hz/60Hz
Rated AC output current	21.70A
Overload capacity	10s@110%~150% rated load; 5s@≥150% rated load; 100ms@≥200% rated load
THDU	<5%, linear load; <10%.non-linear load
Efficiency(peak value)	93%
Surge power	10000VA, 5 cycles
Switching time	10ms
Battery	
Battery type	Lead-acid battery/lithium battery
Rated voltage	48VDC
Charging voltage	54VDC(default), 48~58.4VDC settable
Overcharge protection voltage	60.5VDC
Rated discharge current	113.7A
PV/AC charging	
PV charging	MPPT
Max. PV plate power	6000W
Max. PV plate open circuit voltage	450VDC
MPPT operation range voltage	120~430VDC
Max. PV input current	27A
Max. PV charging current	100A
Max. AC charging current	100A
Max. battery charging current	100A
Others	
Dimension (WxDxH)(mm)	342x122x471
Net weight(kg)	14
Operating environment	-10℃~50℃
IP rating	IP20
Protections	Input over/under voltage protection, input over/under frequency protection, output overload, output short-circuit, radiator over-temperature protection, fan fault detection etc.
Communication interfaces	USB/RS232/RS485, dry contact, WiFi(optional)

Low Voltage Battery

IP66 Stacked 5.12kWh

- Stacking design for easy installation
- Module plug-and-play, automatic recognition
- IP66 system protection rating
- Flexible expansion of battery capacity



Low Voltage Battery

IP20 Rack Floor-Mounted 5.12kWh



Lithium-ion Battery Module

Battery Model	5KWH
General	
Cell technology	LiFePO4
Energy capacity	5.12kWh
Maximum expandable number	6
Scalable capacity range	5.12kWh~30.72kWh
DOD	Max. 100% DOD(settable)
Maximum charging power	3.84kW
Maximum discharging power	5.02kW
Max. charging current	75A
Max. discharge current	98A
Operating temperature	-20~+58℃
Humidity	0~100%RH(Non-condensing)
Communication interface	485 and CAN
Connection method	Floor-mounted
IP rating	IP66
Certification	IEC 62619, IEC 60730, UN 38.3, IEC 62040-1, ROHS2.0, VDE 2510-50
Battery distribution box dimensions(WxHxD)(mm)	600x270x240
Battery dimensions(WxHxD)(mm)	600x380x230
Fixed base dimensions(WxHxD)(mm)	600x380x50

Lithium-ion Battery Module

Battery Model	5KWH
General	
Cell technology	LiFePO4
Energy capacity	5.12kWh
Maximum expandable number	12
Scalable capacity range	5.12kWh~61.44kWh
DOD	Max. 80% DOD(settable)
Maximum charging power	2.56kW
Maximum discharging power	5.12kW
Max. charging current	50A
Max. discharge current	100A
Operating temperature	-20℃~+50℃(Discharge); 0℃~+50℃(Charging)
Humidity	5~95%RH(Non-condensing)
Communication interface	CAN/RS485; 1 DO
Connection method	Floor-mounted
IP rating	IP20
Certification	IEC62368, TUN38. 3
Dimensions(WxHxD)(mm)	440x480x130



High Voltage Battery

IP66 Stacked 5.12kWh

App real-time monitoring, supports online remote OTA upgrades, easy operation and maintenance

Stacking design for easy installation

High voltage batteries are equipped with built-in high efficiency DC-DC modules, making battery expansion more reliable

Battery Specification

Battery Model		EHBS-P5-TH
System component		
Battery type	LiFePO4	
Module capacity	5.12kWh	
System capacity	5~20kWh, expandable	
Module number of battery cluster	1~4	
Maximum cluster number extended for battery system	3	
Rated voltage	750Vdc	
Voltage range	600~1000Vdc	
Max. charge/discharge current	3.4A/5.5A	
Communication interfaces	CAN/RS485	
Dimensions(WxHxD)(mm)	650x350x270	
Net weight	55kg	
Topology	High frequency isolation	
IP rating	IP66	
Operating temperature	-25°C~+55°C	
Cooling mode	Natural cooling	
Heating mode	PTC heating	

Altitude	3000m
Noise level at 1 m	< 40dB
Installation method	Floor-mounted

Standards	
Safety regulation	IEC/EN 62619 2022, ISO 13849, IEC/EN 62040-1, IEC/EN 62477, IEC62109-1/2
EMC	IEC 61000-6-1, EN/IEC 61000-6-3
Transportation	UN 38.3

Battery Distribution Box Specification

MODEL		PDU-SH
Parameter		
Maximum current	50A	
Voltage range	300~1000Vdc	
Display method	LED	
Dimensions(WxHxD)(mm)	650x150x270	
Net weight(kg)	11	
IP rating	IP66	
Others		
Fixed base dimensions(WxHxD)(mm)	650x80x270	

Communication Stick



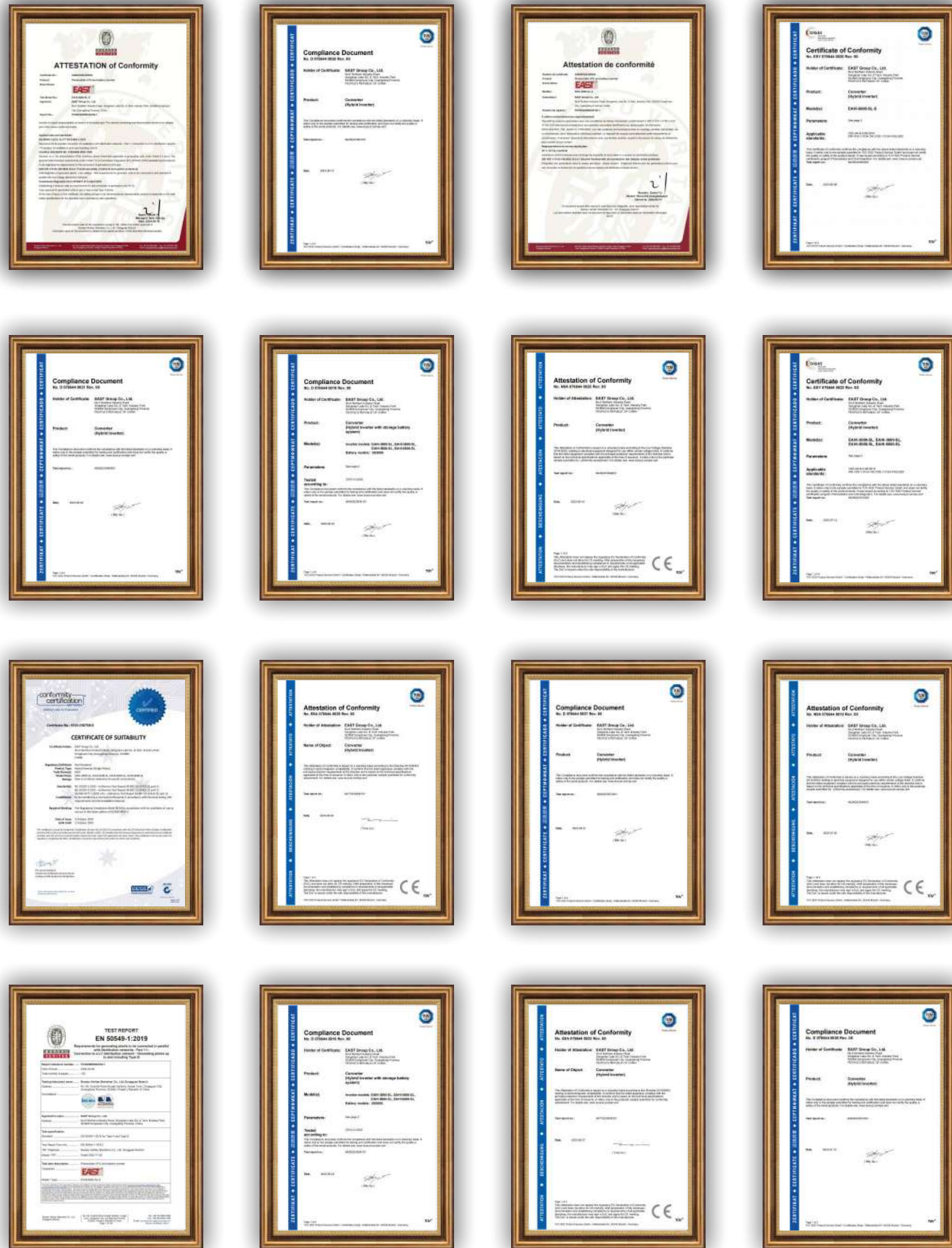
WIFI acquisition stick integrates multiple protocols and can be applied to photovoltaic inverters and other devices equipped with aviation plugs. It collects device information through RS485, can be monitored locally through WIFI, or can be connected to a router(for WIFI collectors) to send the collected data to the monitoring platform.

Users download the “PV Assistant” APP, or log in to the PV cloud platform <https://tools.powerchange.top>, register an account, establish a personal power station, and add the collector to the power station to achieve real-time monitoring of the inverter's working status and power generation.

Communication Stick

MODEL	COMMUNICATION
WIFI wireless parameter	
Wireless standards	802.11b/g/n
Frequency range	2.412GHz-2.484GHz
Transmit power	802.11b: +16+/-2dBm(@11Mbps), 802.11b: +14+/-2dBm(@54Mbps), 802.11b: +13+/-2dBm(@HT20, MCS7)
Receiving sensitivity	802.11b: -87dBm(@11Mbps), 802.11g: -74dBm(@54Mbps), 802.11n: -71dBm(@HT20, MCS7)
Antenna	Onboard PCB antenna
Bluetooth features	
Protocol	Bluetooth 5.2
Output power	(MAX 15dBm)
Transmit power	6dBm
Receiving sensitivity	-95Bm
Onboard PCB antenna	
Frequency	GPRS:900/1800MHZ WIFI:2.4GHZ
SWR	2.0MAX
Input resistance	50Ω
Gain	2dBi
Operating temperature	-20~70°C
Antenna color	Black
Interface	SMA
Hardware parameter	
Data interface	RS485
Operating voltage range	9~20 VDC
Rated power	1.3W
Indicator lights	One channel to connect the inverter to the signal light One channel to connect the router to the signal light One channel heartbeat indicator light
Data storage	4M BYTE FLASH
Operating temperature	-30°C~+70°C
Operating humidity	10%-90% relative humidity, non-condensing
Storage temperature	-45°C~+90°C
Storage humidity	<40%
Product size(mm)	35x84.5
Interface	Aviation plug
Software parameter	
Number of connected inverters	1 set
Acquisition baud rate	Default 9600bps(1200~115200 adjustable)
Data reporting frequency	Default 5 minutes(optional: 1~15 minutes selectable)
User parameter	485 debug instructions
Settings	Local WEB page settings Remote server Bluetooth
Firmware upgrade	Local web page upgrade Remote upgrade
Other	Real-time control, breakpoint resume
Certifcation	
China	SRRC
Europe	CE
USA	FCC
Canada	IC
Brazil	Anatel
Australia/NewZealand	RCM
South Korea	KC*

Related Certificates



Project Presentation



Xinneng Mulei County Forty Wells 10MW/20MWh Wind Power Energy Storage Project



Sanmenxia 50MW/100MWh Shared Energy Storage Project



Zhuhai Power Plant Thermal Power 21MW/10.5MWh Frequency Modulation Project



Inner Mongolia Dengkou County 40MW/80MWh PV Plus Energy Storage Project



Western China (Chongqing) Science City Xiyong Comprehensive Bonded Zone 100MW/200MWh Grid Side Centralized Energy Storage Power Plant



Tianhe Bazhou Energy Yuli County 100MW PV Plant Plus Energy Storage Project



Gansu Wind Power Plant 180MW/720MWh Energy Storage System



Jiangsu Kunshan 3MW/22.5MWh Energy Storage Power Plant