



Specialist in the R&D and Manufacturing
of Energy Storage Inverters

Shenzhen Sosen Innovation Technology Co., Ltd.



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Stock Code:301002.SZ
Your Trusted Inverter Partner



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01 COMPANY INTRODUCTION

02 OUR CORE PRODUCT

03 MONITORING SOFTWARE & ACCESSORY

COMPANY PROFILE

ABOUT SOSEN INNOVATION

Shenzhen SOSEN Innovation Technology Co., Ltd is a wholly-owned subsidiary of SOSEN GROUP which was founded in 2011 and listed in 2017.

Specialized in residential energy storage inverters with power range from **3kW-15kW**, commercial & industrial energy storage inverters **30kW-235kW**.

CORE INDUSTRY BASE



Shenzhen

Headquarter / R&D Center



Zhongshan

Factory

2011

SOSEN Founded

60%+

R&D Staff

10+ years

Manufacturing
Experience

25%+

R&D Investment

30%+

Master Degree

70,000m²

Production Area

OEM&ODM

Available



MILESTONES

Thirteen years of relentless progress embody our company's dedication to action.

2011
SOSEN was founded,
started the business of LED driver,
and explored the overseas market.

2013
Established R&D
center and factory.

Successfully listed on NEEQ
(Stock code:871785)
2017

Listed on Shenzhen stock market
(stock code:301002)
2021

Set up the subsidiary SOSEN INNOVATION,
started the business of
energy storage products.
2022

2019
Expanded the factory,
and improved production capacity.

2022
Built a new R&D and
production base in Zhongshan, 70,000m².

2024
Globalization

COMPANY CERTIFICATES



A Decade of Dependability: Trust in our inverters' 10-year warranty, a testament to our relentless pursuit of excellence in both product quality and customer service.



After accumulating numerous prestigious awards and gaining 13 years of experience, we proudly showcase our company's formidable strength and unwavering commitment to unparalleled quality.



AUTOMATED PRODUCTION EQUIPMENTS



Conformal Coating Machine



ATE



SMT



Automatic Insertion



Automatic Aging



Intelligent Storage



Intelligent Warehouse



Packing

WORLD-CLASS COMPONENTS SUPPLIERS

Diode



IC



MCU



Capacity & Relay



Current Transducer



MOS IGBT





OUR CORE PRODUCT

RESIDENTIAL INVERTER

SSA-HL3K~5K-P1EU
 SSA-HL5K-P1US
 SSE-HL3K~8K-P1EU
 SSE-HH3K~6K-P1EU
 SSE-HH8K~12K-P3EU
 SSE-HL8K~15K-P2US



C & I INVERTER

SSE-HH20K~30K-P3EU
 SSE-HH40K~60K-P3EU
 SSE-HH100K~125K-P3EU
 SSE-BH100K~125K-P3CN
 SSE-HH200K~235K-P3CN



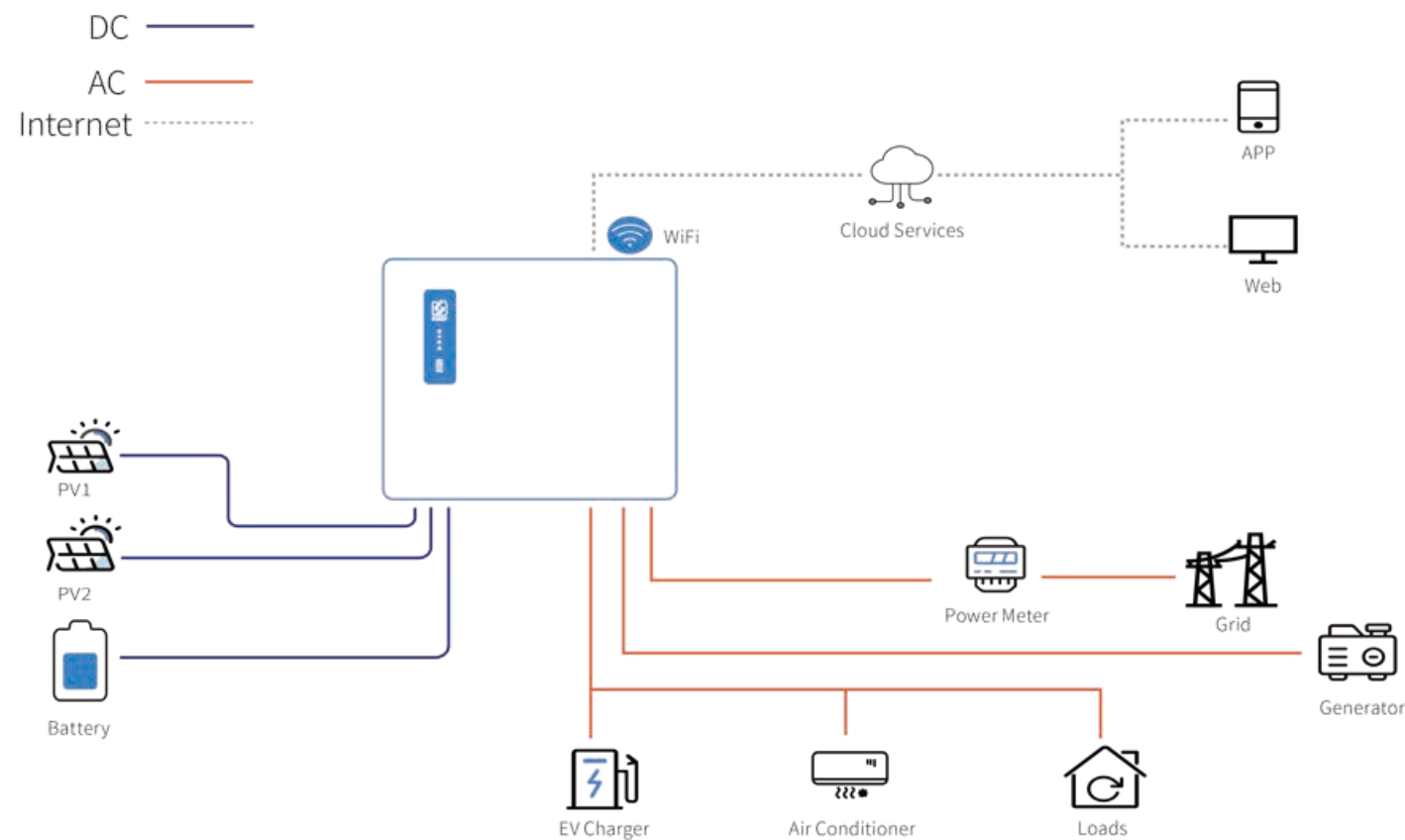
PORTABLE POWER STATION

PE-700
 PE-1000
 PE-1200

Residential Energy Storage Inverter

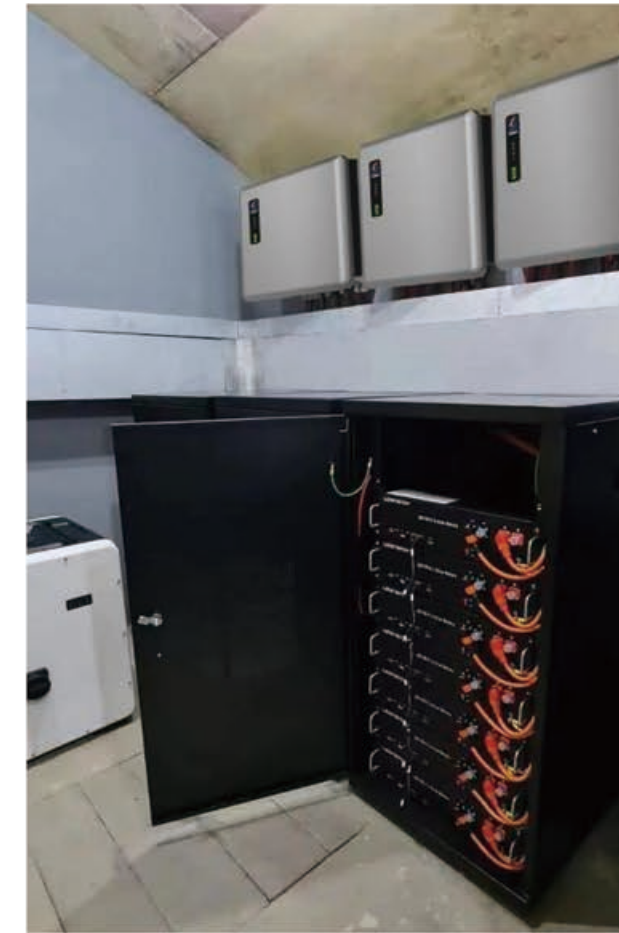


Residential Energy Storage Solution

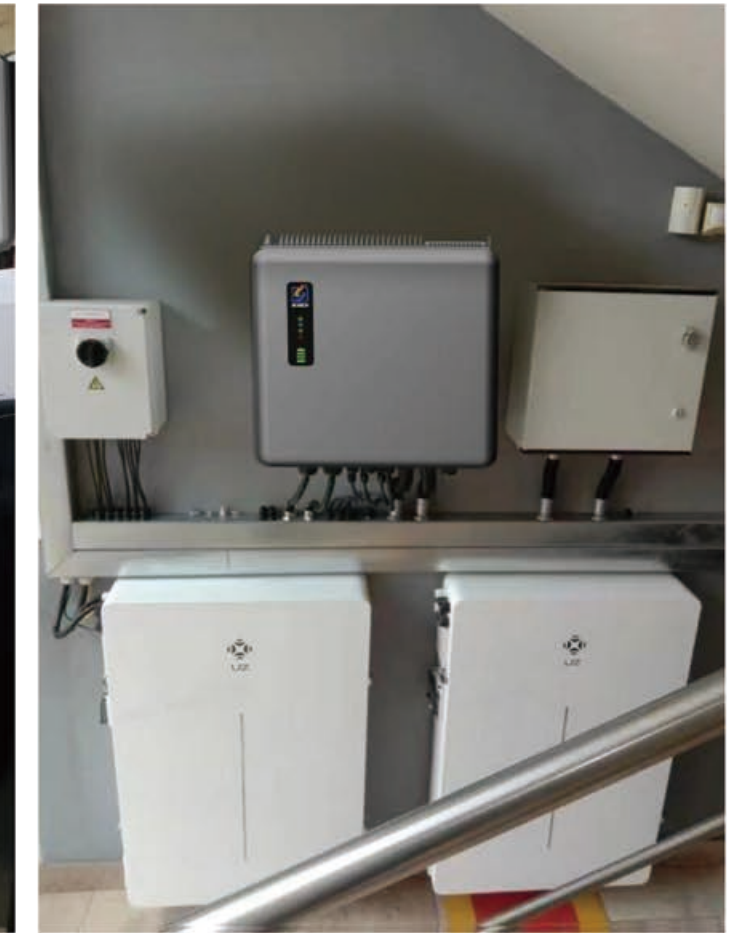


Sosen energy storage inverters are dedicated to bringing clean energy to thousands of households and achieving the goal of a zero-carbon life.

Project Cases



Spain - Bilbao project



Australia - Redhill Aouth Project

Features

- Intelligent energy management
- Natural convection heat dissipation
- High efficiency
- Wide range of battery voltage
- High speed on/off grid switching
- No fan, low noise
- Compatible with on grid and off grid
- Multiple operating modes
- High sealed design With IP65

SSA - HL3K~5K- P1EU

Single Phase Hybrid Inverter

Residential Use

IP 20

2-Year Warranty



SOSEN
INNOVATION

 Easy to install,
smart setting through LCD

 A variety of
intelligent working modes

 Remote monitoring
via APP or Web

 Support BMS
communication

 Support parallel
operation up to 6 units

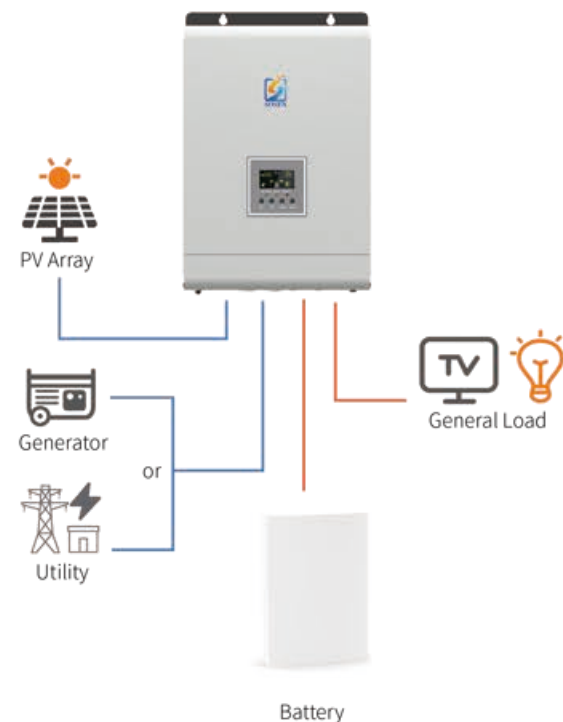
 Can work without battery

Port Description



- 1.Input breaker
- 2.AC output
- 3.AC Input
- 4.Parallel operation
- 5.BAT+
- 6.BAT-
- 7.ON/OFF switch
- 8.PV+/PV-
- 9.USB
- 10.Type-B
- 11.Dry-connect
- 12.RJ45

Product Application Diagram



TECHNICAL SPECIFICATION		
Model	SSA -HL3K-P1EU	SSA -HL5K-P1EU
AC INPUT		
Voltage (nominal)	220/230 V a.c.	
Frequency (nominal)	50 / 60 Hz	
Current(maximum continuous)	40 A a.c.	
INVERTER OUTPUT		
Rated Power	3 kVA	5 kVA
Voltage (nominal or range)	230 V a.c. (± 5%)	
Power Factor Range	1.0 leading ~ 1.0 lagging	
Wave Form	Pure Sine Wave	
Switch Time	<10ms,15ms Max.	
Inverter Efficiency(Peak)	93%	
Current (maximum continuous)	13.6 A a.c.	22.7 A a.c.
Maximum Output Overcurrent Protection	20 A (200 ms)	34 A (200 ms)
BATTERY		
Battery Type	Lithium / Lead-acid	
Nominal Battery Voltage	24 V d.c.	48 V d.c.
Voltage (nominal or range)	21~30.2 V d.c.	42~56.4 V d.c.
Max. Charge Current	120 A d.c.	80 A d.c.
Max. Discharge Current	125 A d.c.	104 A d.c.
Reverse Connect Protection	Yes	
PV INPUT		
No. of MPPT Tracker/Strings	1/1	
Max. PV Array Power	4 kW	6 kW
Max. Dc Voltage	500 V	
MPPT Voltage Range	120 ~450 V	
Start-up Voltage	120 V	
MPPT Maximum charge current	100 A	
Max. Input Current	12 A d.c.	18 A d.c.
Isc PV (Absolute Maximum)	18 A d.c.	27 A d.c.
PROTECTION & FEATURE		
Insulation Monitoring	Yes	
Residual Current Monitoring	Yes	
Parallel Function	No	Yes (up to 6pcs,optional)
Protection Degree	IP20, Indoor only	
Certifications	CE(IEC62109-1), EN61000 NRS	
Other Protection	Overload, Over temperature, Short circuit protection, Anti-islanding	
GENERAL PARAMETER		
Storage Temperature	-10°C ~ +60°C	
Operating Temperature	-10°C ~ +50°C	
Humidity	20%~95% (Non-condensing)	
Altitude	Not over 1000m,Derating over 1000m, Max. 4000m.Refer to IEC62040	
Noise	<50 dB	
Dimensions (L*W*H)	335*125*470 mm	
Shipping Dimensions (L*W*H)	365*185*515 mm	
Machine Weight/ N.W.	8.1 kg	8.6 kg
Shipping Weight/ G.W.	9.3 kg	9.8 kg
DISPLAY AND COMMUNICATION		
Display	LCD display (Display Running Mode,Loads / input / Output etc.)	
Interface	RS485 / CAN / Dry Contact / WiFi (Optional)	

SSA - HL5K - P1US

Single Phase Hybrid Inverter

Residential Use



IP 20

2-Year Warranty



Easy to install,
smart setting through LCD



A variety of
intelligent working modes



Remote monitoring
via APP or Web



Support BMS
communication



Support parallel
operation up to 6 units



Can work without battery

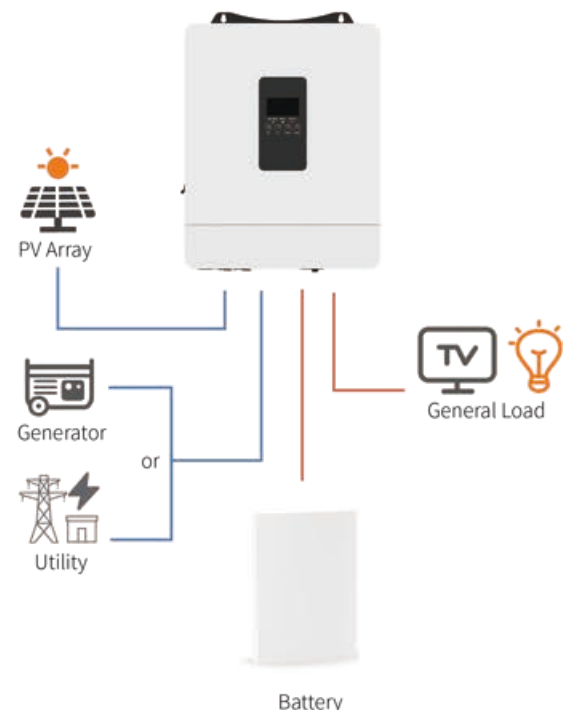
Port Description



- 1.PV IN
- 2.RS485-1
- 3.USB
- 4.Dry-CONNECTION
- 5.PARALLEL CONNECTION
- 6.RS485-2
- 7.AC OUT
- 8.AC IN
- 9.BAT+ BAT-
- 10.ON/OFF
- 11.AC INPUT BREAKER



Product Application Diagram



TECHNICAL SPECIFICATION	
Model	SSA-HL5k-P1US
AC INPUT	
Voltage (Nominal)	120 V. a.c L+N+PE
Frequency (Nominal)	50 / 60 Hz
Current (Maximum Continuous)	41.7 A.a.c.
INVERTER OUTPUT	
Rated Power	5 kW
Voltage (Nominal or Range)	120 V. a.c L+N+PE
Power Factor Range	1.0 leading ~ 1.0 lagging
Wave Form	Pure Sine Wave
Switch Time	<10ms (Typical Value)
Inverter Efficiency (Peak)	>92%
Current (Maximum Continuous)	41.7 A a.c
Maximum Output Overcurrent Protection	63 A (200ms)
BATTERY	
Battery Type	Lithium / Lead-acid
Nominal Battery Voltage	48 V. d.c
Voltage (Nominal or Range)	42~58 V. d.c
Max. Charge Current	100 A. d.c
Max. Discharge Current	100 A. d.c
Reverse Connect Protection	Yes
PV INPUT	
No. of MPPT Tracker / Strings	1/1
Max. PV Array Power	5 kW
Max. Dc Voltage	550 V.d.c
MPPT Voltage Range	120 ~450 V
Start-up Voltage	120 V
MPPT Maximum Charge current	100 A.d.c
Max. Input Current	100 A.d.c
Isc PV (Absolute Maximum)	24 A.d.c
PROTECTION & FEATURE	
Insulation Monitoring	Yes
Residual Current Monitoring	Yes
Parallel Function	Yes (up to 6pcs,optional)
Protection Degree	IP20, Indoor only
Other Protection	Overload, Over temperature, Short circuit protection, Anti-islanding
GENERAL PARAMETER	
Storage Temperature	-10°C ~ +60°C
Operating Temperature	-10°C ~ +50°C
Humidity	0%~95% (Non-condensing)
Altitude	Not over 1000m,Derating over 1000m, Max. 4000m.Refer to IEC62040
Noise	<50 dB
Dimensions (L*W*H)	556*506*206 mm
Shipping Dimensions (L*W*H)	440*300*100 mm
Machine Weight/ N.W.	8 kg
Shipping Weight/ G.W.	9 kg
DISPLAY AND COMMUNICATION	
Display	LCD display (Display Running Mode,Loads / input / Output etc.)
Interface	RS485 / CAN / Dry Contact / WiFi (Optional)



IP 65

10-Year Warranty



Easy to install



A variety of intelligent working modes



Remote monitoring via APP or Web



Support BMS communication

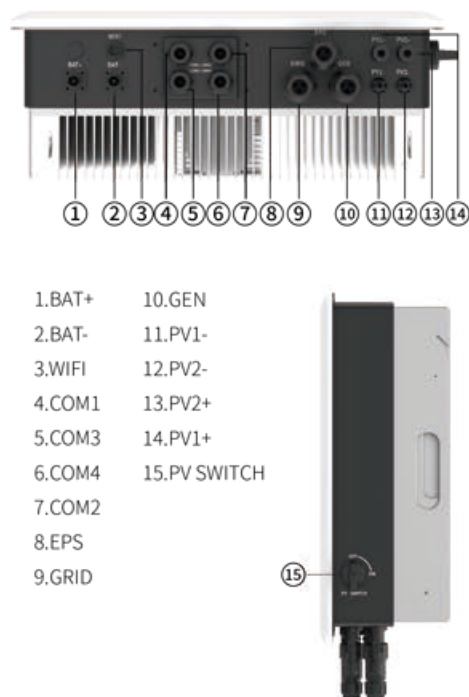


IP65, fanless design, long lifespan

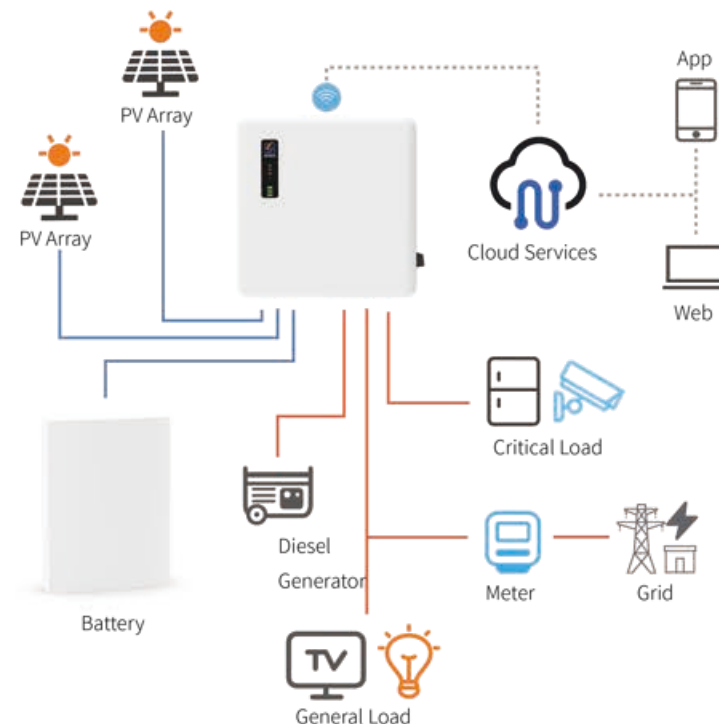


With UPS function, switch time < 10ms

Port Description



Product Application Diagram



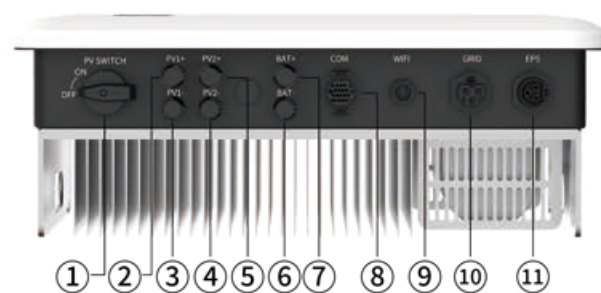
TECHNICAL SPECIFICATION

Model	SSE-HL3K-P1EU	SSE-HL3K6-P1EU	SSE-HL4K-P1EU	SSE-HL4K6-P1EU	SSE-HL5K-P1EU	SSE-HL6K-P1EU	SSE-HL7K-P1EU	SSE-HL8K-P1EU
INVERTER INPUT / OUTPUT (GRID)								
Rated Power	3 kW	3.6 kW	4 kW	4.6 kW	5 kW	6 kW	7 kW	8 kW
Voltage (Nominal or Range)	230 V a.c. / 176 V a.c.~270 V a.c., L+N+PE							
Frequency (Nominal or Range)	50 / 60 Hz							
Power Factor Range	0.8 leading ~ 0.8 lagging							
Wave Form	Pure Sine Wave							
Switch Time	<10 ms							
Current (Maximum Continuous)	13 A a.c.	15.6 A a.c.	17.4 A a.c.	20 A a.c.	21.7 A a.c.	26.1 A a.c.	30.4 A a.c.	34.7 A a.c.
Max. Output Overcurrent Protection	250 V a.c. / 63 A a.c.							
BATTERY								
Battery Type	Lithium / Lead-acid							
Battery Voltage Range	45~58 V							
Nominal Battery Voltage	51.2 V							
Max. Charge Current	60 A d.c.	70 A d.c.	80 A d.c.	90 A d.c.	100 A d.c.	110 A d.c.	120 A d.c.	150 A d.c.
Max. Discharge Current	60 A d.c.	70 A d.c.	80 A d.c.	90 A d.c.	100 A d.c.	110 A d.c.	120 A d.c.	150 A d.c.
Reverse Connect Protection	Yes							
PV INPUT								
No. of MPPT Tracker/Strings	2/1+1							
Max. PV Array Power	4.5 kW	5.4 kW	6 kW	6.9 kW	7.5 kW	9 kW	9 kW	9 kW
Max. DC Voltage	550 V d.c.							
MPPT Voltage Range	120 ~500 V d.c.							
Start-up Voltage	120 V d.c.							
Max. Input Current	16 /16 A d.c.							
Isc PV (Absolute Maximum)	24 /24 A d.c.							
AC OUTPUT (EPS)								
EPS Rated Output Voltage	230 V a.c.							
EPS Rated Output Frequency	50/ 60 Hz							
EPS Rated Output Active Power	3 kW	3.6 kW	4 kW	4.6 kW	5 kW	6 kW	7 kW	8 kW
EPS Rated Output Apparent Power	3 kVA	3.6 kVA	4 kVA	4.6 kVA	5 kVA	6 kVA	7 kVA	8 kVA
EPS Rated Output Current	13 A a.c.	15.6 A a.c.	17.4 A a.c.	20 A a.c.	21.7 A a.c.	26.1 A a.c.	30.4 A a.c.	34.7 A a.c.
EPS Output Power Factor	0.8 leading ~ 0.8 lagging							
Overload Capacity	110% 30 s / 120% 10 s / 150% 0.02 s							
EPS Output Inrush Current	96 A a.c. @ 3 μs							
EPS Max. Output Fault Current	96 A a.c. @ 3 μs							
EFFICIENCY								
MPPT Efficiency	99.90%							
Euro-efficiency	97.00%							
Max. Efficiency	97.80%							
PROTECTION & FEATURE								
Insulation Monitoring	Yes							
Residual Current Monitoring	Yes							
Parallel Function	Yes							
Protection Degree	IP65							
certifications	CEI0-21, EN 50549-1, VDE-AR-N 4105, UNE 217002, NTSTYPEA, G99, AS/NZS 4777.2							
Other Protection	Overload, Over temperature, Shortcircuit protection, Active anti-islanding method							
GENERAL PARAMETER								
Storage Temperature	-25°C~+60°C							
Operating Temperature	-25°C ~ +60°C (Linely derating to 80% when exceed +45°C ~ +60°C)							
Humidity	0-100% (Non-condensing)							
Altitude	2000 m (>2000 m Derating)							
Noise	<35 dB							
Dimensions (L*W*H)	556*206*506 mm							
Shipping Dimensions (L*W*H)	650*375*592 mm							
Machine Weight/ N.W.	25.6 kg							
DISPLAY& COMMUNICATION								
Display	LED							
Interface	CAN/RS485/Bluetooth/WiFi/4G/DRM							



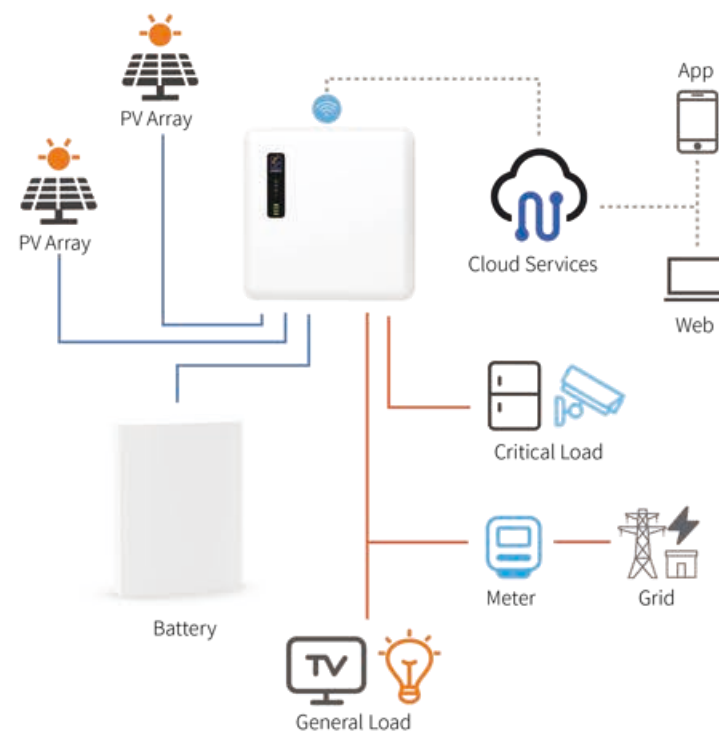
- Easy to install
- A variety of intelligent working modes
- Remote monitoring via APP or Web
- Support wide range battery voltage from 85 to 460 V
- IP65, fanless design, long lifespan
- With UPS function, switch time <20ms

Port Description



1. PV SWITCH
2. PV1+
3. PV1-
4. PV2-
5. PV2+
6. BAT-
7. BAT+
8. COM
9. WIFI
10. GRID
11. EPS

Product Application Diagram



TECHNICAL SPECIFICATION					
Model	SSE-HH3K-P1EU	SSE-HH3K7-P1EU	SSE-HH4K6-P1EU	SSE-HH5K-P1EU	SSE-HH6K-P1EU
INVERTER INPUT / OUTPUT (GRID)					
Rated Power	3 kW+3 kW (bypass)	3.68 kW+3.68 kW (bypass)	4.6 kW+4.6 kW (bypass)	5 kW+5 kW (bypass)	6 kW+6 kW (bypass)
Voltage (Nominal or Range)	220 /230 /240 V a.c., L+N+PE				
Frequency (Nominal or Range)	50 / 60 Hz				
Power Factor Range	0.8 leading ~ 0.8 lagging				
Wave Form	Pure Sine Wave				
Switch Time	<20 ms				
Current (Maximum Continuous)	13 A a.c.	16 A a.c.	20 A a.c.	21.7 A a.c.	26.1 A a.c.
Max. Output Overcurrent Protection	250 V a.c. / 60 A a.c.				
BATTERY					
Battery Type	Lithium /Lead-acid				
Battery Voltage Range	85 ~460 V d.c.				
Nominal Battery Voltage	300 V d.c.				
Max. Charge Current	35 A d.c.	35 A d.c.	35 A d.c.	35 A d.c.	35 A d.c.
Max. Discharge Current	35 A d.c.	35 A d.c.	35 A d.c.	35 A d.c.	35 A d.c.
Reverse Connect Protection	Yes				
PV INPUT					
No. of MPPT Tracker/Strings	2/1+1				
Max. PV Array Power	3 kW / 3 kW	3.68 kW / 3.68 kW	4.14 kW / 4.14 kW	4.5 kW/ 4.5 kW	4.5 kW/ 4.5 kW
Max. DC Voltage	600 V d.c.				
MPPT Voltage Range	80~550 V d.c.				
Start-up Voltage	120 V d.c.				
Max. Input Current	16 /16 A d.c.				
Isc PV (Absolute Maximum)	24 /24 A d.c.				
AC OUTPUT (EPS)					
EPS Rated Output Voltage	220 /230 /240 V a.c., L+N+PE				
EPS Rated Output Frequency	50 / 60 Hz				
EPS Rated Output Active Power	3 kW	3.68 kW	4.6 kW	5 kW	6 kW
EPS Rated Output Apparent Power	3 kVA	3.68 kVA	4.6 kVA	5 kVA	6 kVA
EPS Rated Output Current	13 A a.c.	16 A a.c.	20 A a.c.	21.7 A a.c.	26.1 A a.c.
EPS Output Power Factor	0.8 leading ~ 0.8 lagging				
Overload Capacity	110%30 s/ 120% 10 s/ 150% 0.02 s				
EPS Output Inrush Current	96 A a.c. @ 3us				
EPS Max. Output Fault Current	96 A a.c. @ 3 μs				
EFFICIENCY					
MPPT Efficiency	99.90%				
Euro-efficiency	97.00%				
Max.Efficiency	97.80%				
PROTECTION & FEATURE					
Insulation Monitoring	Yes				
Residual Current Monitoring	Yes				
Parallel Function	Yes				
Protection Degree	IP65				
Certifications	CEI0-21, EN 50549 -1, VDE -AR-N 4105, UNE 217002, NTS TYPEA, G99, AS/NZS 4777.2				
Other Protection	Overload, Over temperature, Short circuit protection, Active anti-islanding				
GENERAL PARAMETER					
Storage Temperature	-25°C ~ +60°C				
Operating Temperature	-25°C ~ +60°C (Linely derating to 80% when exceed +45°C ~ +60°C)				
Humidity	0-100% (Non-condensing)				
Altitude	<2000 m				
Noise	<25 dB				
Dimensions (L*W*H)	480x180x480 mm				
Shipping Dimensions (L*W*H)	580x320x580 mm				
Machine Weight/ N.W.	20 kg				
DISPLAY& COMMUNICATION					
Display	LED				
Interface	CAN/RS485/Bluetooth/WiFi(Optional)				



SSE-HH8K~12K-P3EU

Three Phase Hybrid Inverter

Residential Use

IP 65

10-Year Warranty



Easy Access

Accessible via WiFi and the web



Diverse Modes

Various application modes to accommodate different battery packs, photovoltaic panels, and loads



Diverse Interface

Includes interfaces such as a lithium battery BMS communication card and a WiFi card



Flexibility

Supports single-phase 100% unbalanced load operation off-grid, adapting to various load scenarios



Safe

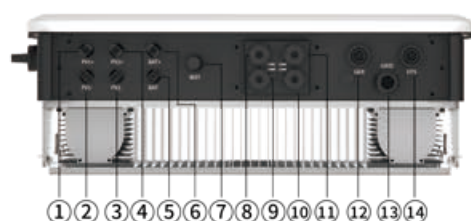
Comprehensive 360-degree security from hardware to software



IP65

Fanless design for a long lifespan

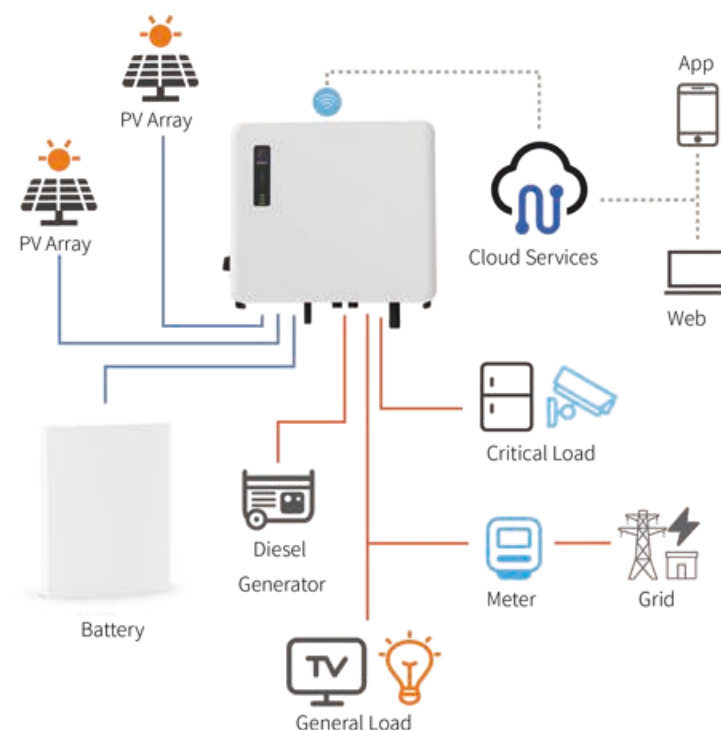
Port Description



- | | |
|--------|--------------|
| 1.PV1+ | 10.COM4 |
| 2.PV1- | 11.COM2 |
| 3.PV2- | 12.GEN |
| 4.PV2+ | 13.GRID |
| 5.BAT- | 14.EPS |
| 6.BAT+ | 15.PV SWITCH |
| 7.WIFI | |
| 8.COM1 | |
| 9.COM3 | |



Product Application Diagram



TECHNICAL SPECIFICATION			
Model	SSE-HH8K-P3EU	SSE-HH10K-P3EU	SSE-HH12K-P3EU
INVERTER INPUT / OUTPUT (GRID)			
Rated Power	8 kW	10 kW	12 kW
Voltage (Nominal or Range)	400 V a.c. /230 V a.c., 3W+N+PE		
Frequency (Nominal or Range)	50 / 60 Hz		
Power Factor Range	0.8 leading ~ 0.8 lagging		
Wave Form	Pure Sine Wave		
Switch Time	<10 ms		
Current (Maximum Continuous)	12.8 A a.c.	15.9 A a.c.	19.1 A a.c.
Max. Output Overcurrent Protection	400 V a.c. / 60 A a.c.		
BATTERY			
Battery Type	Lithium/Lead-acid		
Battery Voltage Range	125~800 V d.c.		
Nominal Battery Voltage	200~800 V d.c.	250~800 V d.c.	300~800 V d.c.
Max. Charge Current	40 A d.c.		
Max. Discharge Current	40 A d.c.		
Reverse Connect Protection	Yes		
PV INPUT			
No. of MPPT Tracker/Strings	2/1+1		
Max. PV Array Power	12 kW	15 kW	18 kW
Max. DC Voltage	1000 V d.c.		
MPPT Voltage Range	150 ~950 V d.c.		
Start-up Voltage	200 V d.c.		
Max. Input Current	16/16 A d.c.		
Isc PV (Absolute Maximum)	24/24 A d.c.		
AC OUTPUT (EPS)			
EPS Rated Output Voltage	400 V a.c. / 230 V a.c.,3W+N+PE		
EPS Rated Output Frequency	50 / 60 Hz		
EPS Rated Output Active Power	8 kW	10 kW	12 kW
EPS Rated Output Apparent Power	8 kVA	10 kVA	12 kVA
EPS Rated Output Current	11.6 A a.c.	14.5 A a.c.	17.4 A a.c.
EPS Output Power Factor	0.8 leading ~ 0.8 lagging		
Overload Capacity	110% 30 s / 120% 10 s / 150% 0.2 s		
EPS Output Inrush Current	50 A a.c. @10 ms		
EPS Max. Output Fault Current	50 A a.c. @10 ms		
EFFICIENCY			
MPPT Efficiency	99.90%		
Euro-efficiency	97.50%		
Max. Efficiency	98%		
PROTECTION & FEATURE			
Insulation Monitoring	Yes		
Residual Current Monitoring	Yes		
Parallel Function	Yes		
Protection Degree	IP65		
Certifications	CEI0-21, EN 50549 -1, VDE -AR-N 4105, UNE 217002,IEC62109-1/2 , IEC61000, NTS631		
Other Protection	Output over voltage protection, Output over current protection, Short circuit protection, Surge protection, Temperature protection, Anti-islanding		
GENERAL PARAMETER			
Storage Temperature	-25°C ~60°C		
Operating Temperature	-25°C ~ 60°C (Linely derating to 60% when exceed 45°C ~ 60°C)		
Humidity	0~100% (No-condensing)		
Altitude	4,000m (>2,000m Derating)		
Noise	< 35 dB		
Dimensions (L*W*H)	600*210*530 mm		
Shipping Dimensions (L*W*H)	660*250* 580 mm		
Machine Weight/ N.W.	35 kg		
DISPLAY& COMMUNICATION			
Display	LED		
Interface	RS485 / WiFi / 4G / Bluetooth / CAN / DRM		



Easy to install



A variety of intelligent working modes



Remote monitoring via APP or Web



Support BMS communication

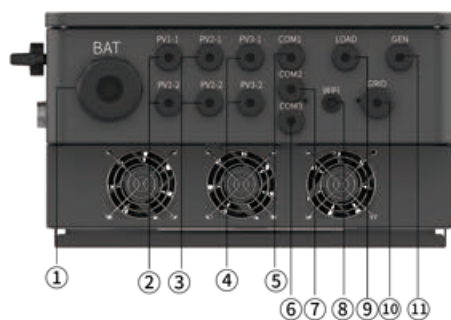


IP65, fanless design, long lifespan

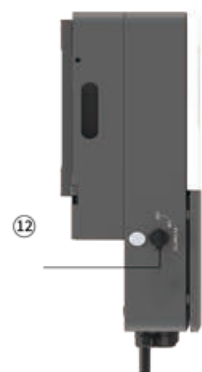


Integrated 3 MPPTs

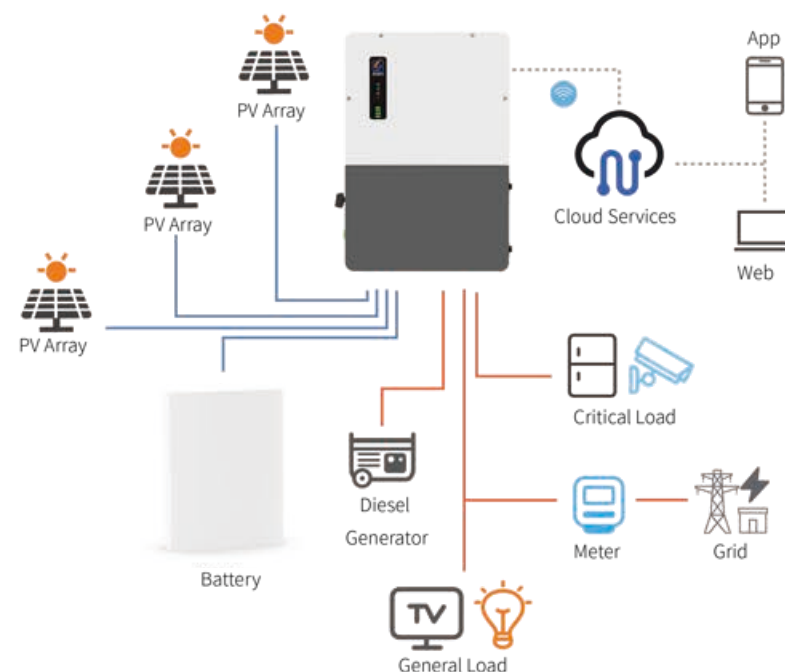
Port Description



- 1.BAT
- 2.PV1
- 3.PV2
- 4.PV3
- 5.COM1
- 6.COM3
- 7.COM2
- 8.WIFI
- 9.LOAD
- 10.GRID
- 11.GEN
- 12.PV SWITCH



Product Application Diagram



TECHNICAL SPECIFICATION				
Model	SSE-HL8K-P2US	SSE-HL10K-P2US	SSE-HL12K-P2US	SSE-HL15K-P2US
INVERTER INPUT / OUTPUT (GRID)				
Rated Power	8 kW	10 kW	12 kW	15 kW
Voltage (Nominal or Range)	120 V a.c. / 240 V a.c. (Split Phase) , 208 V a.c. (2/3Phase)			
Frequency (Nominal or Range)	50 / 60 Hz(±5Hz)			
Power Factor Range	0.8 leading ~ 0.8 lagging			
Wave Form	Pure Sine Wave			
Switch Time	<10 ms			
Current (Maximum Continuous)	33.4 A a.c.	41.7 A a.c.	50 A a.c.	62.5 A a.c.
Max. Output Overcurrent Protection	250 V a.c. / 100 A a.c			
BATTERY				
Battery Type	Lithium / Lead-acid			
Battery Voltage Range	40 ~ 60 V d.c.			
Nominal Battery Voltage	48 V d.c.			
Max. Charge Current	167 A d.c.	210 A d.c.	250 A d.c.	275 A d.c.
Max. Discharge Current	167 A d.c.	210 A d.c.	250 A d.c.	275 A d.c.
Reverse Connect Protection	Yes			
PV INPUT				
No. of MPPT Tracker/Strings	2/2+2	3/2+2+2	3/2+2+2	3/2+2+2
Max. PV Array Power	12 kW	15 kW	18 kW	22.5 kW
Max. DC Voltage	525 V d.c.			
MPPT Voltage Range	120 ~500 V d.c.			
Start-up Voltage	100 V d.c.			
Max. Input Current	26 +26 +26 A d.c.			
Isc PV (Absolute Maximum)	39 A			
AC OUTPUT (EPS)				
EPS Rated Output Voltage	120 / 240 V a.c. (Split Phase) , 208 V a.c. (2/3Phase)			
EPS Rated Output Frequency	50 / 60 Hz			
EPS Rated Output Active Power	8 kW	10 kW	12 kW	15 kW
EPS Rated Output Apparent Power	8 kVA	10 kVA	12 kVA	15 kVA
EPS Rated Output Current	33.4 A a.c.	41.7 A a.c.	50 A a.c.	62.5 A a.c.
EPS Output Power Factor	0.8 leading ~ 0.8 lagging			
Overload Capacity	200% 10s			
EPS Output Inrush Current	200A a.c.			
EPS Max. Output Fault Current	200A a.c.			
EFFICIENCY				
MPPT Efficiency	99.50%			
California-efficiency	96.50%			
Max. Efficiency	97.50%			
PROTECTION & FEATURE				
Insulation Monitoring	Yes			
Residual Current Monitoring	Yes			
Parallel Function	Yes			
Protection Degree	IP 65			
Certifications	CE、RCM、CQC			
Other Protection	Overload, Over temperature, Short circuit protection, Anti-islanding			
GENERAL PARAMETER				
Storage Temperature	-25°C~+60°C			
Operating Temperature	- 25°C ~ 60°C (Linely derating to 60% when exceed +45 °C ~ +60 °C)			
Humidity	0 ~95% (Non-condensing)			
Altitude	4,000m (>2,000 m Derating)			
Noise	<45 dB			
Dimensions (L*W*H)	450*240*700 mm			
Shipping Dimensions (L*W*H)	500*350*800 mm			
Machine Weight/ N.W.	45 kg			
DISPLAY& COMMUNICATION				
Display	LED/APP			
Interface	RS485/WiFi/CAN (Optional: Bluetooth/LAN/4G/Meter)			

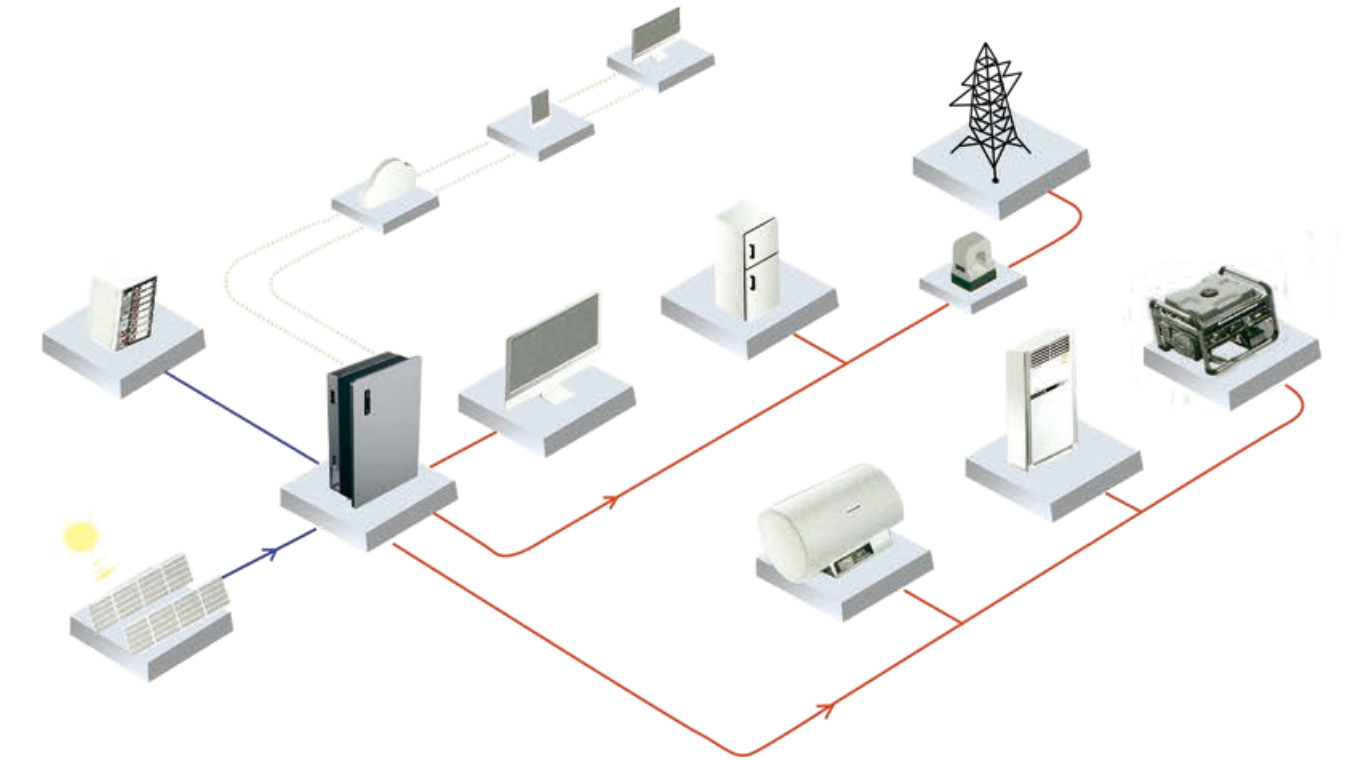
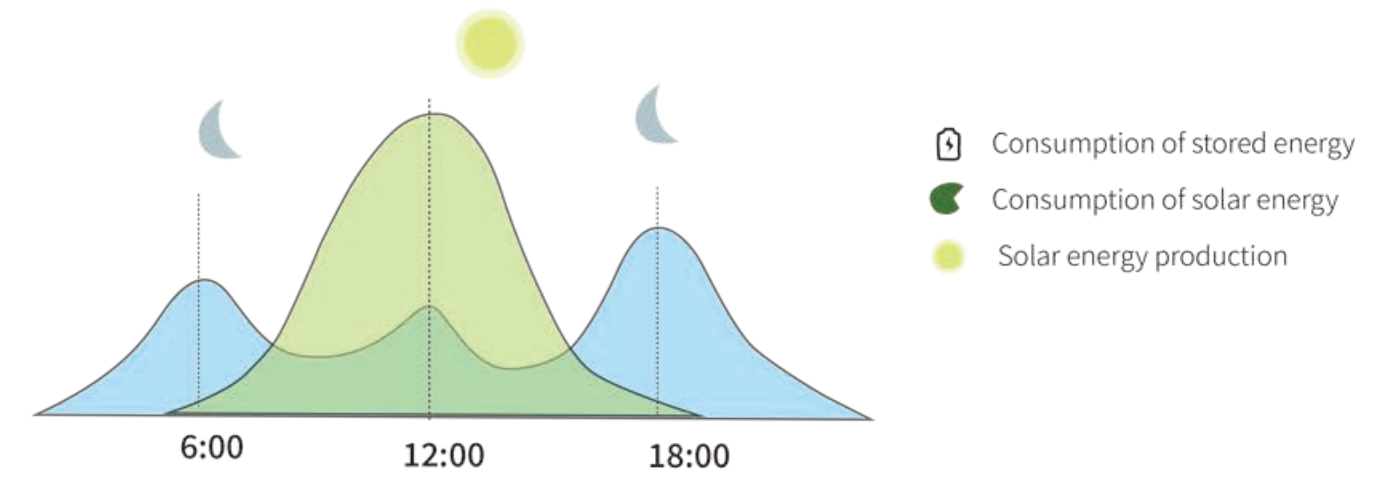
Commercial & Industrial Energy Storage Inverter

Project Cases



To Use Clean and Affordable Energy

Most energy is produced at noon, while peak power usage happens in the morning and evening.



SSE-HH20K~30K-P3EU

Three Phase Hybrid Inverter

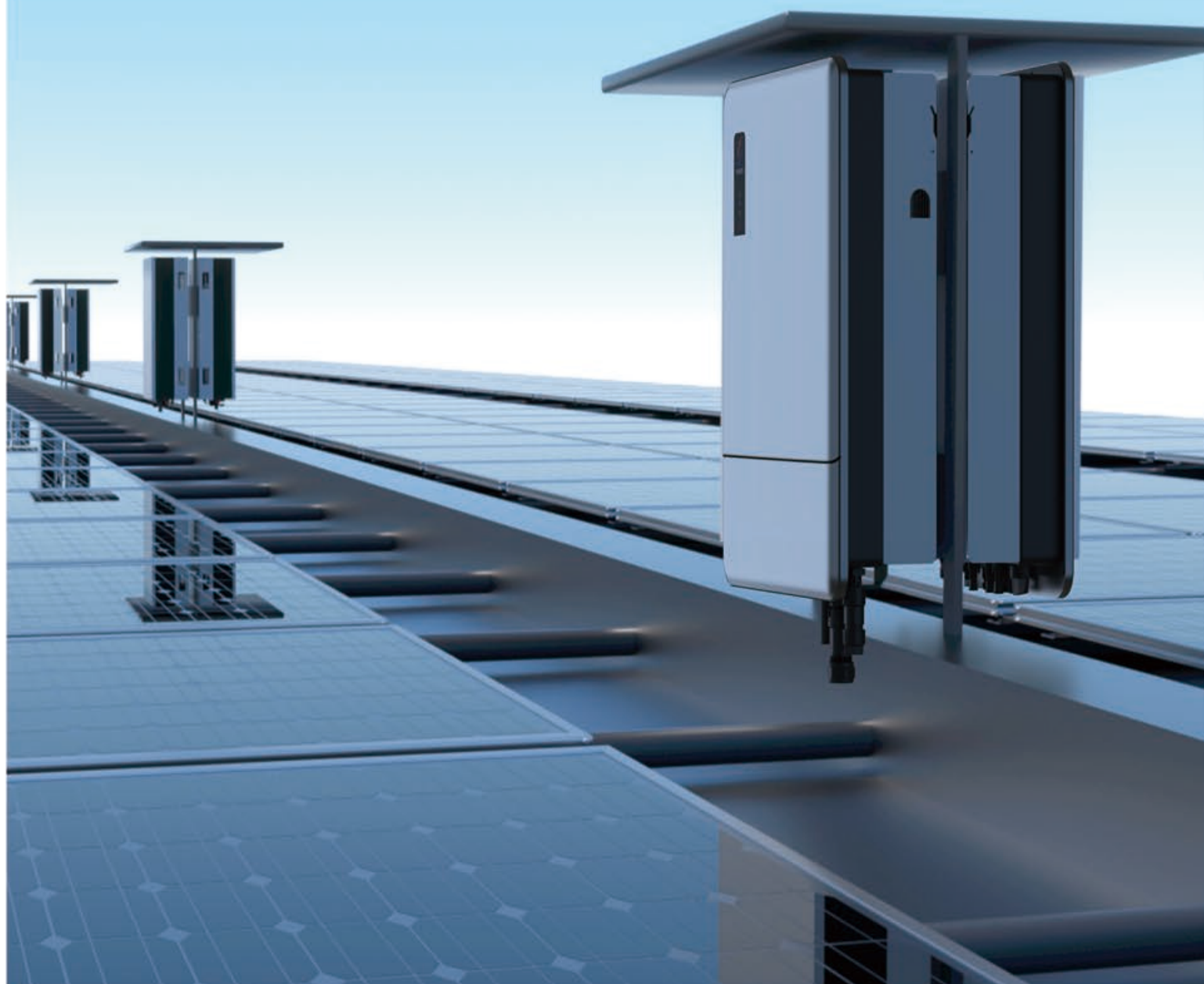


TECHNICAL SPECIFICATION

Model	SSE-HH20K -P3EU	SSE-HH30K-P3EU
INVERTER INPUT / OUTPUT (GRID)		
Rated Power	20 kW	30 kW
Voltage (Nominal or Range)	230 V a.c /176 V a.c~270 V a.c,L+N+PE	
Frequency (Nominal or Range)	50 /60 Hz	
Power Factor Range	0.8 leading ~ 0.8 lagging	
Wave Form	Pure sine wave	
Switch Time	<10 ms	
Current (Maximum Continuous)	13 A a.c	15.6 A a.c
Max. Output Overcurrent Protection	250 V a.c/63 A a.c	
BATTERY		
Battery Type	Lithium /Lead-acid	
Battery Voltage Range	160-700 V d.c.	
PV INPUT		
No. of MPPT Tracker/Strings	3/2+2+2	
Max. PV Array Power	24000 W	36000 W
Max. DC Voltage	1000 V d.c	
MPPT Voltage Range	180-900 V d.c	
Max. Input Current	3*36 A d.c.	
Isc PV (Absolute Maximum)	3*42 A d.c.	
AC OUTPUT (EPS)		
EPS Rated Output Voltage	3L/N/PE 230 /400 V a.c.	
EPS Rated Output Frequency	50/60 Hz	
EPS Rated Output Active Power	20000 W	30000 W
EPS Rated Output Apparent Power	22000 VA	33000 VA
EPS Rated Output Current	29 A a.c.	43.5 A a.c.
EPS Output Power Factor	0.8 leading - 0.8 lagging	
EFFICIENCY		
MPPT Efficiency	99.90%	
Euro-efficiency	97.50%	
PROTECTION & FEATURE		
Insulation Monitoring	Yes	
Residual Current Monitoring	Yes	
Parallel Function	Yes	
Protection Degree	IP65	
certifications	CEI0-21, EN 50549-1, VDE-AR-N 4105, UNE 217002, NTSTYPEA, G99, AS/NZS 4777.2	
Other Protection	Overload, Over temperature, Shortcircuit protection, Active Anti-islanding	
GENERAL PARAMETER		
Operating Temperature	40°C~ 60°C (>45°C, Derating)	
Humidity	0~95% (Non-condensing)	
Altitude	2,000 m (>2,000 m Derating)	
Noise.	<65 dB	
DISPLAY& COMMUNICATION		
Interface	RS485/WiFi/CAN/DRM(Optional: Bluetooth/LAN/4G/Meter)	

SSE-HH40K~60K-P3EU

Three Phase Hybrid Inverter



TECHNICAL SPECIFICATION			
Model	SSE-HH40K-P3EU	SSE-HH50K -P3EU	SSE-HH60K -P3EU
INVERTER INPUT / OUTPUT (GRID)			
Rated Power	40 kW	50 kW	60 kW
Voltage (Nominal or Range)	230 /400 V a.c.		
Frequency (Nominal or Range)	50/60 Hz		
Power Factor Range	0.8 leading ~ 0.8 lagging		
Wave Form	Pure sine wave		
Switch Time	<20 ms		
Current (Maximum Continuous)	58 A	72 A	87 A
Max. Output Overcurrent Protection	123 A	153 A	185 A
BATTERY			
Battery Type	Lithium / Lead-acid		
Battery Voltage Range	125 V d.c -800 V d.c.		
Nominal Battery Voltage	200 V	250 V	300 V
Max. Charge Current	100 A*2		
Max. Discharge Current	100 A*2		
Reverse Connect Protection	Yes		
PV INPUT			
No. of MPPT Tracker/Strings	4/2+2+2+2		
Max. PV Array Power	68 kW	85 kW	100 kW
Max. DC Voltage	1000 V		
MPPT Voltage Range	125 ~ 850 V		
Start-up Voltage	150 V		
Max. Input Current	40 A		
Isc PV (Absolute Maximum)	60 A		
AC OUTPUT (EPS)			
EPS Rated Output Voltage	400 V a.c./380 V a.c.		
EPS Rated Output Frequency	50 / 60 Hz		
EPS Rated Output Active Power	40 kW	50 kW	60 kW
EPS Rated Output Apparent Power	44 kVA	55 kVA	66 kVA
EPS Rated Output Current	58 A	72 A	87 A
EPS Output Power Factor	0.8 leading ~ 0.8 lagging		
Overload Capacity	110% 30s/ 120% 10s/ 150% 0.2s		
EPS Output Inrush Current	200 A		
EPS Max. Output Fault Current	200 A		
EFFICIENCY			
MPPT Efficiency	99.9%		
Euro-efficiency	97.2%		
Max. Efficiency	98.5%		
PROTECTION & FEATURE			
Insulation Monitoring	Yes		
Residual Current Monitoring	Yes		
Parallel Function	Yes, up to six		
Protection Degree	IP65		
Certifications	CEI0-21, EN 50549-1, VDE-AR-N 4105, UNE 217002, NTSTYPEA, G99, AS/NZS 4777.2		
Other Protection	Ground Fault Current Monitoring, Earth Fault Detection, Residual Current (RCD) Detection		
GENERAL PARAMETER			
Storage Temperature	- 40°C~ 70°C		
Operating Temperature	- 25°C~ 60 °C (>45°C Derating)		
Humidity	0% ~ 95% (Non-condensing)		
Altitude	4,000 m (>2,000 m Derating)		
Noise	<45 dB		
Dimensions (L*W*H)	530*850*290 mm		
Shipping Dimensions (L*W*H)	680*1050*400 mm		
Machine Weight / N.W.	75 kg		
DISPLAY& COMMUNICATION			
Display	LED+APP		
Interface	RS485/WiFi/CAN/DRM(Optional: Bluetooth/LAN/4G/Meter)		

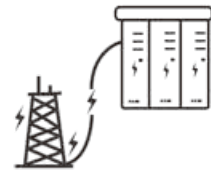
SSE-HH100K~125K-P3EU

Power Conversion System (PCS)

C&I Use

IP 66

5-Year Warranty



Protect your power supply

Built-in black start functionality ensures backup power for your site



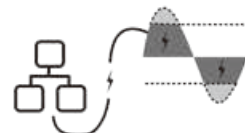
Industrial & Commercial

Versatile and adaptable for various applications, it can be installed indoors or in a customized container



100% unbalanced output

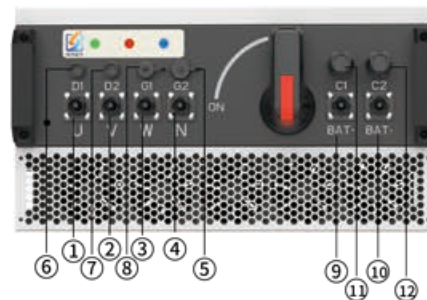
Supports 100% unbalanced load operation even under off-grid conditions



Leading intelligent design

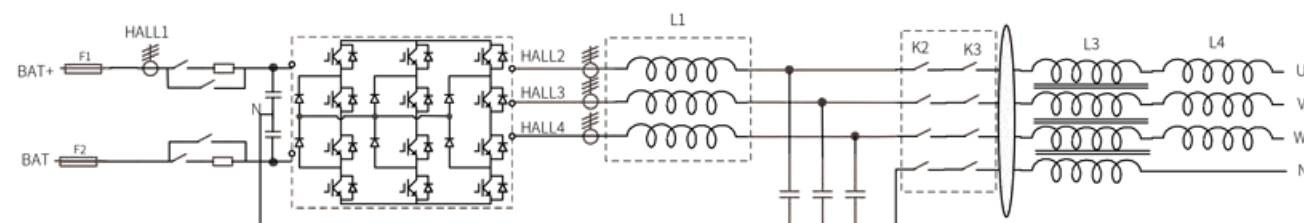
Enables peak load shifting and supports parallel operation from 4 to 12 units

Port Description



- | | |
|------|---------|
| 1.U | 7.D2 |
| 2.V | 8.G1 |
| 3.W | 9.BAT+ |
| 4.N | 10.BTA- |
| 5.G2 | 11.C1 |
| 6.D1 | 12.C2 |

System Schematic Diagram



TECHNICAL SPECIFICATION

Model	SSE-HH100K -P3EU	SSE-HH125K -P3EU
Product Type	Power Conversion System (PCS)	
AC (ON-GRID)		
Rated Power	100 kW	125 kW
Voltage (Nominal or Range)	3L/N/PE 230/400 V a.c.,340~440V a.c. AC(-15%~+10%)	
Frequency (Nominal or Range)	50 /60 Hz	
Power Factor Range	1.0 leading ~ 1.0 lagging	
Overload Capacity	110% long-term	
Max.Apparent Output Power	110 kVA	137.5 kVA
AC Output Rated Current	144 A a.c.	181 A a.c.
Max.Output Current	159 A a.c.	200 A a.c.
THDi	< 3%	
AC(OFF-GRID)		
Rated Output Voltage	3L/N/PE 230V a.c./400 V a.c.	
Rated Output Frequency	50 /60 Hz	
Max. Apparent Output Power	110 kVA	137.5 kVA
THDU	<2% (Linear Load)	
DC (BATTERY)		
Battery Type	Lithium /Lead-acid	
Battery Voltage Range	580-1000 V d.c.	
Max.Charging/Discharging Power	110 kW	137.5 kW
GENERAL PARAMETER		
Cooling	Intelligent air cooling	
Relative humidity	0~95% (Non-condensing)	
Altitude	4,000 m (>3,000 m, Derating)	
Ingress Protection	IP66	
Ambient Temperature	-35°C~55°C(>45°C, Derating)	
Protective Class	I	
Over Voltage Category	III (AC), II(DC)	
Inverter Topology	Non-isolated	
Dimensions (L*W*H)	850*520*280 mm	
Shipping Dimensions (L*W*H)	950*800*480 mm	
Machine Weight / N.W.	85 kg	
DISPLAY AND COMMUNICATION		
Communication Interface	S485 / CAN / Ethernet (Optional)	

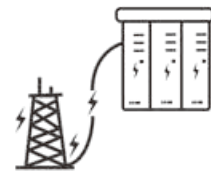
SSE-BH100K~125K-P3CN

Power Conversion System (PCS)

C&I Use

IP 20

5-Year Warranty



Protect your power supply

Built-in black start functionality ensures backup power for your site



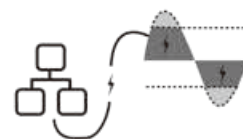
Industrial & Commercial

Versatile and adaptable for various applications, it can be installed indoors or in a customized container



100% unbalanced output

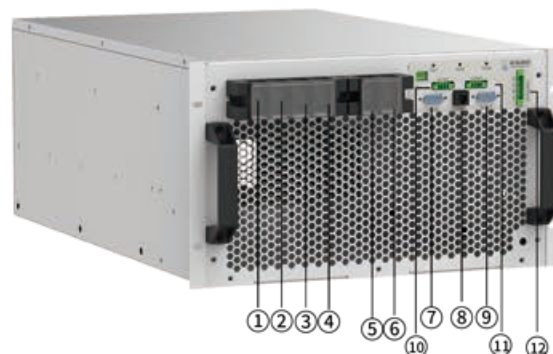
Supports 100% unbalanced load operation even under off-grid conditions



Leading intelligent design

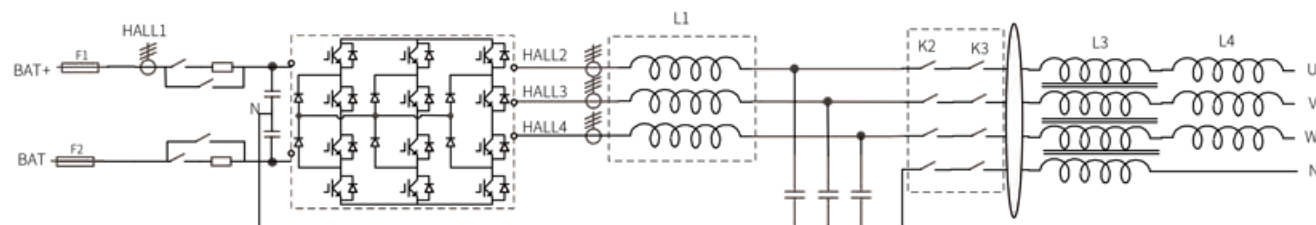
Enables peak load shifting and supports parallel operation from 4 to 12 units

Port Description



- | | |
|--------|------------|
| 1.U | 7.COM1 |
| 2.V | 8.COM2 |
| 3.W | 9.COM3 |
| 4.N | 10.SYNC |
| 5.BAT- | 11.COM4 |
| 6.BAT+ | 12.OFFGRID |

System Schematic Diagram



TECHNICAL SPECIFICATION

Model	SSE-BH100K -P3CN	SSE-BH125K -P3CN
Product Type	Power Conversion System (PCS)	
AC (ON-GRID)		
Rated Power	100 kW	125 kW
Voltage (Nominal or Range)	3L/N/PE 230/400 V a.c.,340~440 V a.c. AC(-15%~+10%)	
Frequency (Nominal or Range)	50 /60 Hz	
Power Factor Range	1.0 leading ~ 1.0 lagging	
Overload Capacity	110% long-term	
Max. Apparent Output Power	110 kVA	137.5 kVA
AC Output Rated Current	144 A a.c.	181 A a.c.
Max. Output Current	159 A a.c.	200 A a.c.
THDi	< 3%	
AC(OFF-GRID)		
Rated Output Voltage	3L/N/PE 230V a.c./400 V a.c.	
Rated Output Frequency	50 /60 Hz	
Max. Apparent Output Power	110 kVA	137.5 kVA
THDU	<2% (Linear Load)	
DC (BATTERY)		
Battery Type	Lithium /Lead-acid	
Battery Voltage Range	580-1000 V d.c.	
Max. Charging/Discharging Power	110 kW	137.5 kW
GENERAL PARAMETER		
Cooling	Intelligent air cooling	
Relative Humidity	0~95% (Non-condensing)	
Altitude	4,000 m (>3,000 m, Derating)	
Ingress Protection	IP 20	
Ambient Temperature	-35°C~55°C(>45°C, Derating)	
Protective Class	I	
Over Voltage Category	III (AC), II(DC)	
Inverter Topology	Non-isolated	
Dimensions (L*W*H)	700*440*265mm	
Shipping Dimensions (L*W*H)	800*600*450mm	
Machine Weight/ N.W.	65 kg	
DISPLAY AND COMMUNICATION		
Communication Interface	S485 / CAN / Ethernet (Optional)	

SSE-HH200K~235K-P3CN

Power Conversion System (PCS)

C&I Use

IP 66

5-Year Warranty



Efficient

Bidirectional energy conversion with a maximum efficiency up to 99%.



Flexible

Modular system design, ideal for large-scale source-side and commercial & industrial user-side applications.



Smart

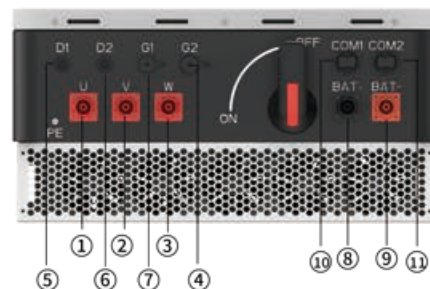
Supports constant power, constant current, and constant voltage control, with LVRT & HVRT, and black start functionality.



Safe

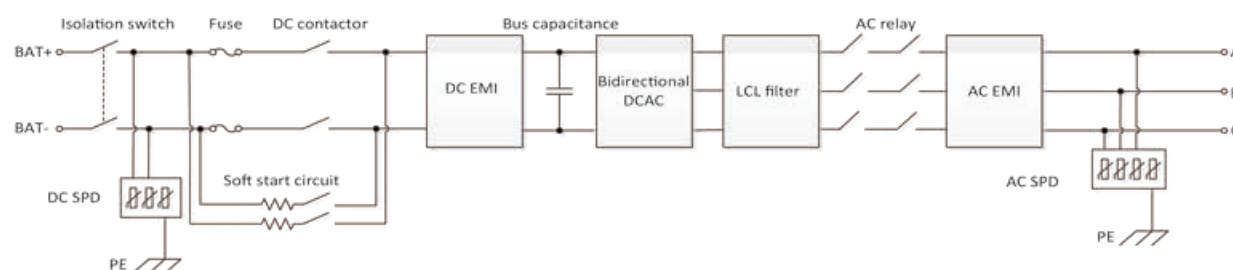
Features anti-islanding protection and IP66 rating.

Port Description



- | | |
|------|---------|
| 1.U | 7.G1 |
| 2.V | 8.BTA- |
| 3.W | 9.BAT+ |
| 4.G2 | 10.COM1 |
| 5.D1 | 11.COM1 |
| 6.D2 | |

System Schematic Diagram



TECHNICAL SPECIFICATION

Model	SSE-HH200K -P3CN	SSE-HH215K -P3CN	SSE-HH235K -P3CN
Product Type	Power Conversion System (PCS)		
AC (ON-GRID)			
Rated Power	200 kW	215 kW	235 kW
Voltage (Nominal or Range)	3L/PE 400/690 V a.c. (-15%~+10%)		
Frequency (Nominal or Range)	50 / 60 Hz		
Power Factor Range	1.0 leading ~ 1.0 lagging		
Max. Apparent Output Power	220 kVA	236.5 kVA	258.5 kVA
AC Output Rated Current	167 A a.c.	180 A a.c.	200 A a.c.
Max. Output Current	184 A a.c.	200 A a.c.	220 A a.c.
THDi	< 3%		
DC (BATTERY)			
Battery Type	Lithium / Lead-acid		
Battery Voltage Range	1000-1500 V d.c.		
Max. Charging / Discharging Power	220 kW	215 kW	235 kW
GENERAL PARAMETER			
Cooling	Intelligent air cooling		
Relative Humidity	0~95% (Non-condensing)		
Altitude	4,000 m(>2,000 m, Derating)		
Ingress Protection	IP66		
Ambient Temperature	-35°C~55°C(>45°C, Derating)		
Protective Class	I		
Over Voltage Category	III (AC), II(DC)		
Inverter Topology	Non-isolated		
Dimensions (L*W*H)	900*600*295mm		
Shipping Dimensions (L*W*H)	1000*760*500mm		
Machine Weight/ N.W.	100 kg		
DISPLAY AND COMMUNICATION			
Communication Interface	RS485 / Ethernet / CAN (Optional)		

Portable Power Station

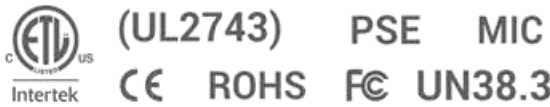
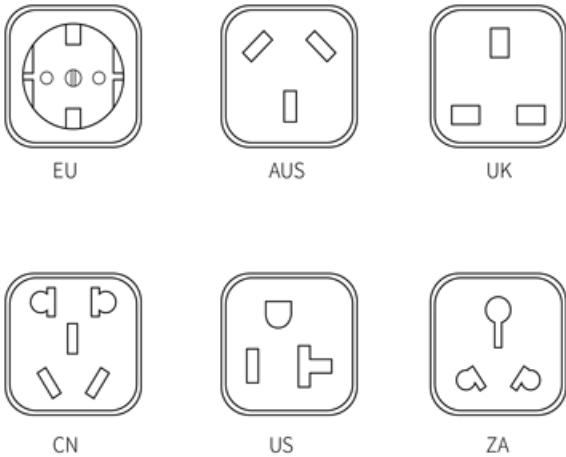




Features

- Automotive grade battery cells
- Pure sine wave, appliances friendly
- Long battery cycle life:>3000 times
- Bidirectional inverter technology
- Recharging 80% within 1 hour
- ECO mode (can set at APP)
- 8 safety BMS protection modes
- 3 recharge ways
- 5 output modes
- 10 output ports
- Ergonomically designed and easy to carry

AC Output Socket



Charging Methods



Charging Times



TECHNICAL SPECIFICATION	
Model	PE-700
Capacity	307 Wh (8S2P)25.6V 12 Ah
Battery Cell	LFP(LiFePo4)
Cycle life	3000 (80% DOD)
Monitor	LCD
Housing Material	PC+ABS
Color	Optional
Stand-by Power	<2 W
OUTPUT	
AC Output	1*AC outlets 230 V 60 / 50 Hz / 1*AC outlets 110 V 60 / 50 Hz
Rated AC Output / AC	700 W /1400 W
AC Output Efficiency	88% ~ 90%
USB-A Output	2*18 W (36 W Max.)
USB-C Output	Front:1*100 W;Back:2*100 W,200 W Max.
DC Output DC5521	2*13.6 V / 5 A 10 A Max.
Cigarette Lighter	1*13.6 V / 10 A Max.
Charge and Discharge simultaneously	Support
INPUT	
AC Charging Power	1*220-240 V 50 Hz 450 W / 1*110-120 V 50 Hz 450 W
Solar / Car Recharge	1*11-28 V / 200 W MPPT
LED Lamp for Emergency	
LED Power	3 W
LED Mode	(High / Medium / Low / Flash / SOS)
BMS MULTI PROTECTION	
Over voltage, over current, over charge, over discharge, overload, short circuit, high temperature, low temperature	
OTHERS	
Certifications	CETLUS(UL2743), CE,FCC, PSE, MIC, ROHS, UN38.3, RCM, MSDS
Dimension(L*W*H)	255*185*175 mm
N.W. / G.W.	5.85 kg / 7.49 kg
Charging Temperature	0°C to +45°C (32°F to 113°F)
Storage Temperature	-20°C to +60 °C (-4°F to 140°F)
Discharging Temperature	-20°C to +45°C (-4°F to 113°F)
Bluetooth / WiFi	Optional
Packing List	Power station, AC charging cable, Car charging cable, User manual



PE-1000

Portable Power Station

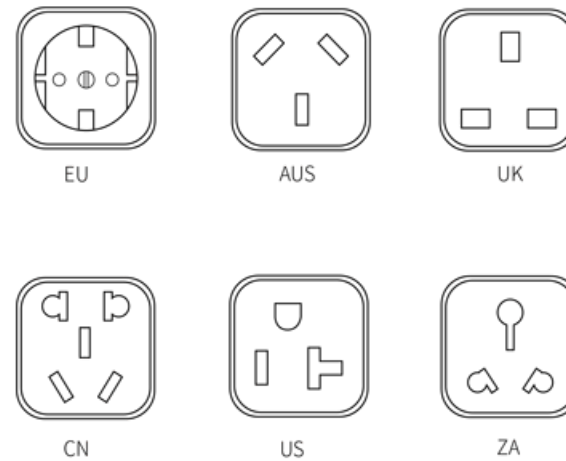
3-Year Warranty



Features

- Automotive grade battery cells
- Pure sine wave, appliances friendly
- Long battery cycle life: >3000 times
- Bidirectional inverter technology
- Recharging 80% within 1 hour
- ECO mode (can set at APP)
- 8 safety BMS protections modes
- 4 recharge ways
- 4 output modes
- 10 output ports
- Ergonomically designed, easy to carry

AC Output Socket



(UL2743) PSE MIC
CE ROHS FC UN38.3

Charging Methods



Charging Times



TECHNICAL SPECIFICATION

Model	PE-1000
Capacity	1008Wh (7S3P) 22.4 V 45Ah
Battery Cell	LFP(LiFePO4)
Cycle Life	3000 (80% DOD)
Monitor	LCD
Housing Material	Aluminum + PC+ABS
Color	Optional
OUTPUT	
AC Output EU / AU / UK	2*AC outlets 230 V / 50 Hz
Rated Ac Output / Peak Ac Output	1000 W / 1500 W
USB-A Output	2*5W & 2*18 W
USB-C Output	1*100 W (Bidirectional)
DC Output DC5521	3*13.6 V 5 A (10A Max.)
Recharge and Charge simultaneously	Support
INPUT	
AC Charging Power	1*220 ~240 V / 50 Hz 1000 W
Solar / Car Recharge	1*11~55 V / 300 W MPPT
Type-C	1*100 W (Bidirectional)
LED LIGHT	
LED Power and LED Mode	4 W (High / Medium / Low / Flash / SOS)
BMS MLUTI PROTECTION	
Over voltage, over current, over charge, over discharge, overload, short circuit , high temperature, low temperature	
OTHERS	
Certifications	TUV-UL2743, CE, FCC, PSE, MIC, ROHS, UN38.3, MSDS
Dimension(L*W*H)	360 x186 x226 mm
N.W. / G.W.	13.6 kg / 15.1 kg
Charging Temperature	0°C to +45 °C(32°F to 113°F)
Discharging Temperature	-20°C to +45°C(-4°F to 113°F)
Storage Temperature	-20°C to +60°C(-4°F to 140°F)
Packing list	Power station, AC charging cable, Car charging cable, User manual



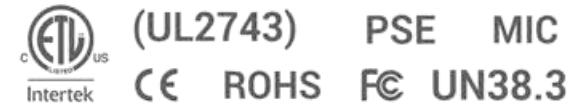
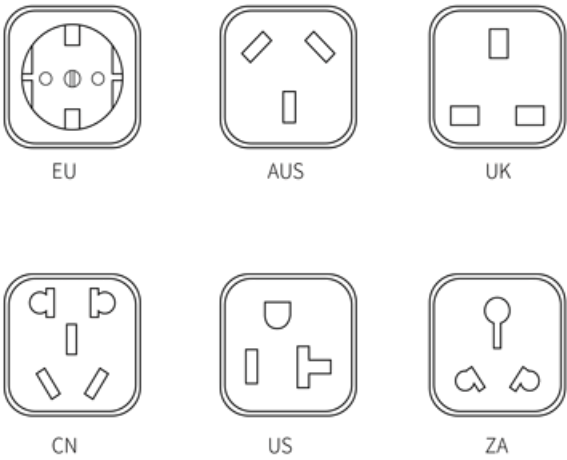
PE-1200
Portable Power Station

3-Year Warranty

Features

- Automotive grade battery cells
- Pure sine wave,appliances friendly
- Long battery cycle life:>3000times
- Bidirectional inverter technology
- Recharging 80% within 1 hour
- ECO mode (can set at APP)
- 8 safety BMS protection modes
- 3 recharge ways
- 4 output modes
- 7 output ports
- Ergonomically designed easy to carry

AC Output Socket



Charging Methods



Charging Times



TECHNICAL SPECIFICATION

Model	PE-1200
Capacity	1024Wh (8S2P) 25.6 V 40 Ah
Battery Cell	LFP (LiFePO4)
Cycle Life	2000 (80% DOD)
Monitor	LCD
Housing Material	PC+ABS
Color	Optional
OUTPUT	
AC Output EU/AU/UK	2*AC outlets 230 V 50 Hz
Rated Ac Output/Peak AC Output	1200 W / 1800 W
USB-A Output	1*5 W and 1*18 W
USB-C Output	2*100 W
Cigarette lighter	1*13.6 V/ 8A 10 A Max.
Recharge and Charge simultaneously	Support
INPUT	
AC Charging Power	1*200 ~ 240 V 50 Hz 800 W
Solar	1*11 ~ 55 V
Car Recharge	300 W MPPT
LED LIGHT	
LED Power	5 W
BMS MLUTI PROTECTION	
Over voltage, over current, over charge, over discharge, overload, short circuit, high temperature, low temperature	
OTHERS	
Certifications	TUV-UL2743 , CE, FCC, PSE, MIC, ROHS, UN38.3, MSDS
Dimension(L*W*H)	365 *225 *265 mm
N.W. / G.W.	13.6 kg / 16 kg
Charging Temperature	0°C to +45 °C(32°F to 113°F)
Discharging Temperature	-20°C to +45°C (-4°F to113°F)
Storage Temperature	-20°C to+60°C (-4°F to 140°F)
Packing List	Power station, AC charging cable, Car charging cable, User manual

MONITORING SOFTWARE & ACCESSORY

SOSEN Cloud

New generation SOSEN PV monitoring platform

Sosen Cloud is an advanced PV system monitoring solution that offers you real-time control and insights from anywhere. With customizable fault alerts and a user-friendly interface, it simplifies O&M by displaying all installations and live power flows. The intelligent alarm system provides quick repair recommendations, ensuring you have full command over your solar and storage systems

Features

Advanced Cloud Platform

- Connecting with multiple types of devices seamlessly: Inverters, export power managers, weather stations, etc.

Efficient O & M

- Smart curve scan, system health report, string-level fault finding

Multiple Plant Management

- Manage multiple types of systems across residential, commercial and utility scale plants. Enables multiple team management across different sectors

Full Screen Display Mode

- Clear and concise display of system performance and benefits including carbon emissions saved.



Scan QR code to download



Accessory

Wi-Fi / 4G / Bluetooth / Ethernet / RS485

Utilize the RS485 communication protocol to interconnect the inverters, allowing for the simultaneous connection of the required number of units. Implement data communication with the monitoring system via a wireless WiFi network or a Local Area Network (LAN). This setup enables remote control and monitoring capabilities.

The network facilitates the transmission of clear and intuitive data, providing customers with the convenience to monitor the system at any time and from any location.

SOSEN Data Loggers

DB9



4Pin



Features

- Support WiFi and LAN communication
- Plug and play, quick installation
- Status indicator, easy to display
- One-key assignment of inverter address, efficient and labor-saving
- RESET button, one key to send data, convenient debugging
- Fault alarm, real-time monitoring