



Specifications

SSE-HL3-7K-P1EU Hybrid Inverter

Model: SSE-HL3-7K-P1EU

Description: 3K-7K Hybrid Inverter

Rev: V01

Release Date: 2023-11-28

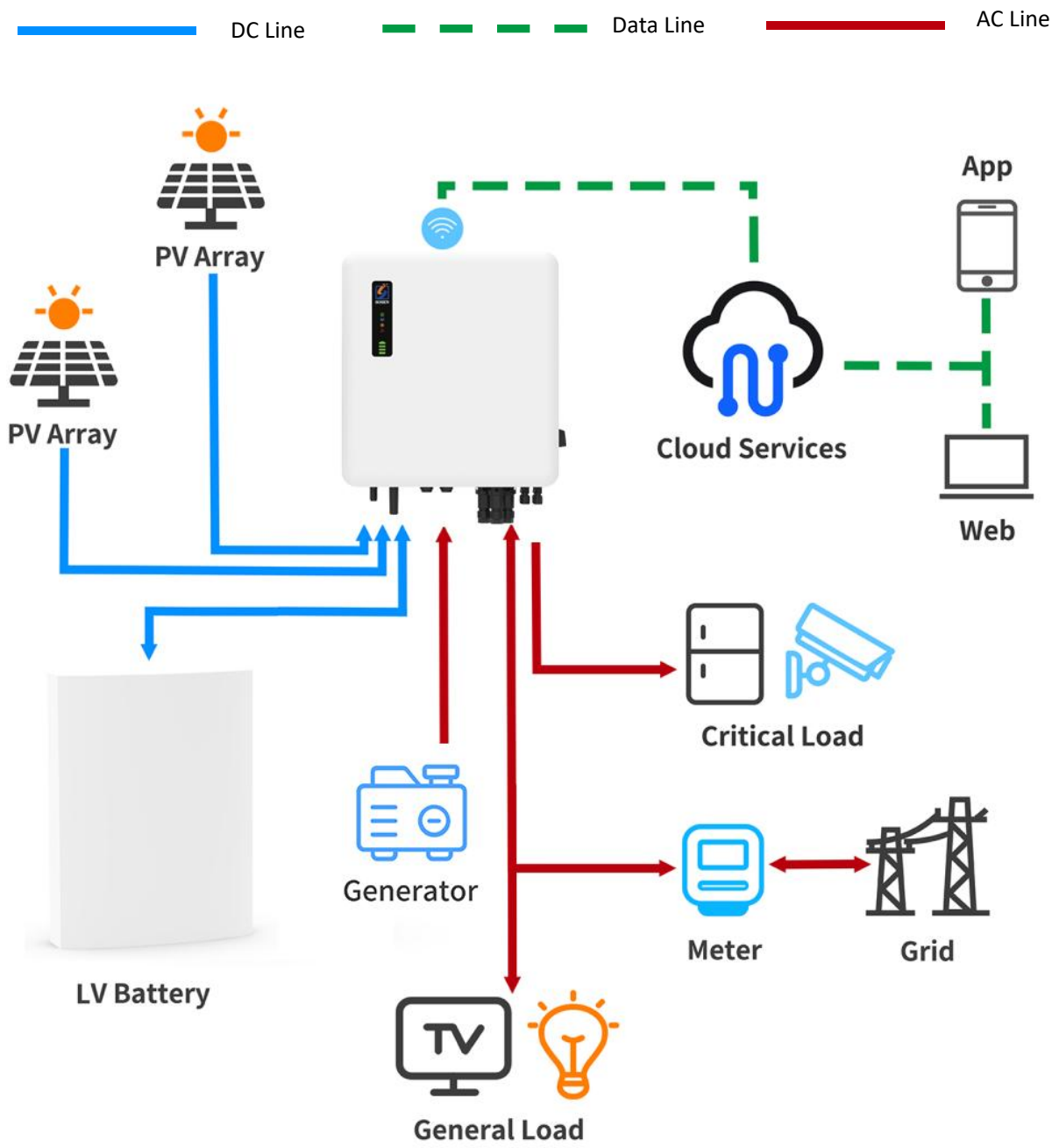
SSE-HL3-7K-P3EU Hybrid Inverter



Key Features

1. Supports 40-60V battery voltage range, compatible with BMS protocols from mainstream manufacturers, and can also customize BMS protocol docking according to customer needs.
2. Supports multiple starting methods. A single battery, PV or power grid can be started independently. Supports black start off-grid.
3. Using advanced digital control technology and TI's latest DSP, the MPPT dynamic response speed and accuracy are greatly improved. The harmonic current and voltage are less than 3%, reducing damage to the power grid and equipment.
4. Integrate local and remote EMS functions and support multiple working modes: self-use, TOU, backup power mode, generator mode, economic mode, balance mode, special weather mode, etc.
5. Support functions such as remote OTA and online diagnosis, online fault data recording and analysis, saving labor costs and fault location time.
6. The entire machine structure and wiring terminals adopt IP65 protection level, which can adapt to a variety of harsh environments and ensure reliable operation of the equipment.
7. Supports up to 12 parallel machines, and supports SOC balancing function under parallel machines. It can adjust multiple battery packs to keep SOC consistent and improve battery availability and consistency.
8. Supports multiple communication methods, Ethernet, 4G, WiFi, Bluetooth, dry contact, DRM, 485 and CAN, etc.
9. Compatible with generator access, important load interface expansion, etc.
10. Equipped with UPS function and off-grid switching <math><10\text{ms}</math>, ensuring uninterrupted power supply to important loads.
11. The charge and discharge unit adopts isolation topology to ensure the safety of battery use under extreme working conditions.

Residential Photovoltaic and Storage Integration Platform



SMART MANAGEMENT
VIA WEB & APP



EMERGENCY POWER
SUPPLY



'PLUG & PLAY'
INSTALLATION



IP65 RATED



EMS INTEGRATED



COMPATIBLE WITH
LV LI-ION BATTERY

SSE-HL3-7K-P3EU Hybrid Inverter

Model for EU	SSE-HL3K-P1EU	SSE-HL3K6-P1EU	SSE-HL4K-P1EU	SSE-HL4K6-P1EU	SSE-HL5K-P1EU	SSE-HL6K-P1EU	SSE-HL7K-P1EU
Product Type	Hybrid Inverter						
Battery							
Battery Type	Li-ion						
Battery Voltage range	45-58V d.c						
Rated Battery Voltage	51.2V d.c						
Max.charge/discharge Power	3000W	3600W	4000W	4600W	5000W	6000W	7000W
Max Charge Current	60A d.c	70A d.c	80A d.c	90A d.c	100A d.c	110A d.c	120A d.c
Max Discharge Current	60A d.c	70A d.c	80A d.c	90A d.c	100A d.c	110A d.c	120A d.c
BMS Communication	CAN/RS485						
Reverse Connect Protection	Yes						
PV Input							
Recommended Max. PV array power for each input	4500W	4500W	4500W	4500W	4500W	4500W	4500W
Max. operating PV input current (PV 1 /PV 2)	15/15A d.c						
Max. Isc PV (PV 1 /PV 2)	24/24 A d.c						
Vmax PV (Max. PV input voltage)	550V d.c						
PV input operating voltage range	120-550V d.c						
MPPT Voltage Range	100-550V d.c						
Full power MPPT voltage range	300-520V d.c						
Start-up Voltage	100V d.c						
Number of MPP Trackers	2						
Strings per MPP Tracker	1						
Number of PV input	2						
Grid AC input and AC output							
Grid rated voltage	220/230/240V a.c, 1W+N+PE						
Grid rated frequency	50/60Hz						
Grid rated input active power	3000W+3000W (bypass)	3600W+3600W (bypass)	4000W+4000W (bypass)	4600W+4600W (bypass)	5000W+5000W (bypass)	6000W+6000W (bypass)	7000W+7000W (bypass)
Grid rated input apparent power	3000VA+3000VA (bypass)	3600VA+3600VA (bypass)	4000VA+4000VA (bypass)	4600VA+4600VA (bypass)	5000VA+5000VA (bypass)	6000VA+6000VA (bypass)	7000VA+7000VA (bypass)
Grid Max. input active power	3300W+3300W (bypass)	3960W+3960W (bypass)	4400W+4400W (bypass)	5060W+5060W (bypass)	5500W+5500W (bypass)	6600W+6600W (bypass)	7700W+7700W (bypass)
Grid Max. input apparent power	3300VA+3300VA (bypass)	3960VA+3960VA (bypass)	4400VA+4400VA (bypass)	5060V+5060V (bypass)	5500VA+5500VA (bypass)	6600VA+6600VA (bypass)	7700VA+7700VA (bypass)
Grid rated output active power	3000W	3600W	4000W	4600W	5000W	6000W	7000W
Grid rated output apparent power	3000VA	3600VA	4000VA	4600VA	5000VA	6000VA	7000VA
Grid Max. output active power	3300W	3960W	4400W	5060W	5500W	6600W	7700W
Grid Max. output apparent power	3300VA	3960VA	4400VA	5060VA	5500VA	6600VA	7700VA
Grid rated input current	13+13A a.c (bypass)	16+16A a.c (bypass)	17+17A a.c (bypass)	20+20A a.c (bypass)	21+21A a.c (bypass)	26+26A a.c (bypass)	30+30A a.c (bypass)
Grid rated output current	13A a.c	16A a.c	17A a.c	20A a.c	21A a.c	26A a.c	30A a.c
Grid power factor	0.8 leading to 0.8 lagging						
Grid input and output Inrush current	96A a.c @ 3μs						
Max. Grid output fault current	96A a.c @ 3μs						
Max. Grid output overcurrent protection	250V a.c /60 A a.c						
Grid input Icc (Rated conditional short-circuit current)	500A a.c						
Grid input Icw (Rated short-time withstand current)	500A a.c						
Total Harmonic Distortion (THDi, rated power)	<3%						

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EPS Output	SSE- HL3K-P1EU	SSE- HL3K6-P1EU	SSE- HL4K-P1EU	SSE- HL4K6-P1EU	SSE- HL5K-P1EU	SSE- HL6K-P1EU	SSE- HL7K-P1EU
EPS rated output Voltage	220/230/240V a.c, 1W+N+PE						
EPS rated output frequency	50/60Hz						
EPS rated output active power	3000W	3600W	4000W	4600W	5000W	6000W	7000W
EPS rated output apparent power	3000VA	3600VA	4000VA	4600VA	5000VA	6000VA	7000VA
EPS rated output current	13A a.c	16A a.c	17A a.c	20A a.c	21A a.c	26A a.c	30A a.c
EPS output power factor	0.8 leading to 0.8 lagging						
EPS output peak power	6600VA(<10s)						
EPS output Inrush current	96A a.c @ 3μs						
EPS Max. output fault current	96A a.c @ 3μs						
EPS Max. output overcurrent protection	250V a.c /60 A a.c						
Switch Time	<20ms						
Total Harmonic Distortion (THDv, linear Load)	<2%						
Compatible with the Generator	Optional						
Efficiency							
MPPT Efficiency	99.90%						
Euro-efficiency	97.00%						
Max. efficiency	97.80%						
Standard							
Safety	EN/IEC 62109-1/2, EN/IEC 60529, EN/IEC 62040-1						
EMC	EN IEC 61000-6-1, EN IEC 61000-6-3, EN IEC 61000-3-12, EN IEC 61000-3-11, EN IEC 61000-3-2, EN 61000-3-3						
Grid-interactive	CEI 0-21, EN 50549-1, VDE-AR-N 4105, UNE 217002, NTS TYPEA, G99, AS/NZS 4777.2 and so on						
General Data							
Degree of ingress protection	IP65						
Protection class	I						
Environment category	Outdoor						
Wet location classification	Yes						
Pollution degree	PD3						
Operating altitude	<2000 m						
Operating ambient temperature	-25 - +60 °C (linely derating to 60% when exceed +45 to +60 °C)						
Operating relative Humidity	0-100% (non-condensing)						
Storage Temperature	-25- +60 °C						
Storage relative Humidity	0-100% (non-condensing)						
Noise Emission(typical)	<35 db						
Overvoltage Category	AC: III, PV: II						
Electrical supply system	TN, TT						
Dimension (WxHxD)	506*556*206mm						
Net Weight	25kg						
Cooling Mode	Natural Cooling						
Topology	Non-isolated						
Active anti-islanding method	Active frequency drift						
Communication with Meter	RS485						
Communication with Portal	Bluetooth/WIFI (Optional)/CAN/RS485						
LED indicator	8 led						
Warranty	10 years						