solis

GINLONG TECHNOLOGIES CO.,LTD.

S6-EH1P(12-16)K03-NV-YD-L

Solis Single Phase Low Voltage Energy Storage Inverters

Features:

- Generator-compatible to extend backup duration during grid power outage
- Multiple inverters can operate together to form a microgrid
- Supports dual backup ports for intelligent control of critical and non-critical loads
- 10 seconds of 200% overload capability
- Automatic switchover time is < 4ms, providing seamless transitions from grid to backup
- Supports a maximum input current of 20A, making it ideal for all high-power PV modules of any brand
- Ensures excellent power supply stability, keeping the load unaffected by a weak grid or generator supply fluctuations
- The battery's DC side can handle a maximum charge/discharge current of up to 290A, allowing it to store more surplus energy generated by PV systems



Models:

S6-EH1P12K03-NV-YD-L

S6-EH1P14K03-NV-YD-L

S6-EH1P16K03-NV-YD-L

DATASHEET

S6-EH1P(12-16)K03-NV-YD-L

Models	12K	14K	16K
Input DC (PV side)			
Recommended max. PV array size	24 kW	28 kW	32 kW
Max. usable PV input power	19.2 kW	22.4 kW	22.4 kW
Max. input voltage		550 V	
Rated voltage		380 V	
Start-up voltage		100 V	
MPPT voltage range		100 - 450 V	
Max. input current		40 A / 40 A / 40 A	
Max. short circuit current		50 A / 50 A / 50 A	
MPPT number / Max. input strings number		3 / 6	
Battery			
Battery type		Li-ion / Lead-acid	
Battery voltage range		40 - 60 V	
Max. charge / discharge current	250 A	290 A	290 A
Communication		CAN / RS485	
Output AC (Grid side)			
Rated output power	12 kW	14 kW	16 kW
Operation phase		L/N/PE	
Rated grid voltage		220 V / 230 V	
Rated grid frequency		50 Hz	
Rated grid output current	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Input AC (Grid side)			
Input voltage range		187 - 253 V	
Max. input current	81.8 A / 78.3 A	95.5 A / 91.3 A	109.1 A / 104.3 A
Frequency range		45 - 55 Hz / 55 - 65 Hz	
Output AC (Back-up)			
Rated output power	12 kW	14 kW	16 kW
Max. apparent output power		2 times of rated power, 10 s	
Back-up switch time		< 4 ms	
Rated output voltage		L/N/PE, 220 V / 230 V	
Rated frequency		50 Hz	
Rated output current	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A
THDv (@linear load)		< 3%	
Input Generator			
Max. input power	12 kW	14 kW	16 kW
Max. input current	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A
Rated input frequency		50 Hz	
Efficiency			
Max. efficiency		97.6%	
EU efficiency		97.0%	
BAT charged by PV max. efficiency		> 94.9%	
BAT charged / discharged to AC max. efficiency		> 94.33% / 93.51%	
Protection			
Surge protection		Yes	
DC reverse-polarity protection		Yes (PV only)	
Ground fault monitoring		Yes	
Integrated AFCI 2.0		Optional	
Protection class / Over voltage category		I / II (PV and BAT), III (MAINS and BACKUP and GEN)	
General Data			
Dimensions (W × H × D)		464 × 763 × 282 mm	
Weight		48.5 kg	
Topology		Transformerless	
Operating ambient temperature range		-25 ~ +60°C	
Ingress protection		IP66	
Noise emission (typical)		< 65 dB(A)	
Cooling concept		Intelligent fan-cooling	
Max. operation altitude		4000 m	
Grid connection standard		NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, EN50549-1	
Safety / EMC standard		IEC/EN 62109-1/-2, EN 61000-6-2/-3	
Features			
DC connection		MC4 plug (PV port) / Terminal Block (BAT port)	
AC connection		Terminal Block	
Display		7.0" LCD display & Bluetooth + APP	
Communication		RS485, Optional: Cellular, Wi-Fi, LAN	