

S6-EH3P(30-50)K-H

Solis Three Phase High Voltage Energy Storage Inverters

Features:

- 4 MPPTs, 8 strings at 20A, and up to 96kW usable PV input
- 140A/70A+70A max charge/discharge on two independently controlled ports
- Supports 1.6 times rated output for 2 seconds on the backup port
- Supports parallel operation of up to 6 units for on and off-grid use
- Operates as a grid-tied inverter without batteries when on-grid
- Multi-input generator connectivity with automatic on/off control
- Supports peak shaving control in both "self-use" and "generator" mode

Models:

S6-EH3P30K-H

S6-EH3P40K-H

S6-EH3P50K-H



DATASHEET

S6-EH3P(30-50)K-H

| Models | 30K | 40K | 50K |
|---|--|--------------------------------------|-----------------|
| Input DC (PV side) | | | |
| Recommended max. PV array size | 60 kW | 80 kW | 100 kW |
| Max. usable PV input power | 60 kW | 80 kW | 96 kW |
| Max. input voltage | | 1000 V | |
| Rated voltage | | 600 V | |
| Start-up voltage | | 180 V | |
| MPPT voltage range | | 150-850 V | |
| Max. input current | 3*40 A | | 4*40 A |
| Max. short circuit current | 3*60 A | | 4*60 A |
| MPPT number/Max. input strings number | 3/6 | | 4/8 |
| Battery | | | |
| Battery type | | Li-ion | |
| Battery voltage range | | 150-800 V | |
| Max. charge / discharge power | 33 kW | 44 kW | 55 kW |
| Max. charge / discharge current | | 70 A ⁽¹⁾ | |
| No. of battery inputs | | 2 | |
| Max. charge / discharge power of each input | 33 kW | 40 kW | 40 kW |
| Communication | | CAN/RS485 | |
| Output AC (Grid side) | | | |
| Rated output power | 30 kW | 40 kW | 50 kW |
| Max. apparent output power | 30 kVA | 40 kVA | 50 kVA |
| Rated grid voltage | | 3/N/PE, 220 V / 380 V, 230 V / 400 V | |
| Rated grid frequency | | 50 Hz | |
| Rated grid output current | 45.6 A / 43.3 A | 60.8 A / 57.7 A | 76 A / 72.2 A |
| Max. output current | 45.6 A / 43.3 A | 60.8 A / 57.7 A | 76 A / 72.2 A |
| Power factor | | >0.99 (0.8 leading - 0.8 lagging) | |
| THDi | | < 3% | |
| Input AC (Grid side) | | | |
| Max. AC passthrough current | 91.2 A / 86.6 A | 121.6 A / 115.4 A | 152 A / 144.4 A |
| Rated input voltage | | 3/N/PE, 220 V / 380 V, 230 V / 400 V | |
| Rated input frequency | | 50 Hz | |
| Input Generator | | | |
| Max. input power | 30 kW | 40 kW | 50 kW |
| Rated input current | 45.6 A / 43.3 A | 60.8 A / 57.7 A | 76 A / 72.2 A |
| Rated input voltage | | 3/N/PE, 220 V / 380 V, 230 V / 400 V | |
| Rated input frequency | | 50 Hz | |
| Output AC (Back-up) | | | |
| Rated output power | 30 kW | 40 kW | 50 kW |
| Max. apparent output power | | 1.6 times of rated power, 2 s | |
| Back-up switch time | | < 10 ms | |
| Rated output voltage | | 3/N/PE, 220 V / 380 V, 230 V / 400 V | |
| Rated frequency | | 50 Hz | |
| Rated output current | 45.6 A / 43.3 A | 60.8 A / 57.7 A | 76 A / 72.2 A |
| THDv (@linear load) | | < 2% | |
| Efficiency | | | |
| Max. efficiency | | 97.8% | |
| EU efficiency | | 97.4% | |
| BAT charged by PV Max. efficiency | | 98.5% | |
| BAT charged/discharged to AC Max. efficiency | | 97.5% | |
| Protection | | | |
| Anti-islanding protection | | Yes | |
| Output over current protection | | Yes | |
| Short circuit protection | | Yes | |
| Integrated DC switch | | Optional | |
| DC reverse-polarity protection | | Yes | |
| Surge protection | | DC Type II / AC Type II | |
| Integrated AFCI (DC arc-fault circuit protection) | | Yes ⁽²⁾ | |
| General Data | | | |
| Dimensions (W*H*D) | | 530*880*290 mm | |
| Weight | | 73 kg | |
| Topology | | Transformerless | |
| Self-consumption (night) | | <25 W | |
| Operating ambient temperature range | | -25 ~ +60°C | |
| Relative humidity | | 0-95% | |
| Ingress protection | | IP66 | |
| Cooling concept | | Intelligent redundant fan-cooling | |
| Max. operation altitude | | 4000 m | |
| Grid connection standard | G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1/EN 50549-10, VDE 0126 / UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA | | |
| Safety/EMC standard | IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4 | | |
| Features | | | |
| PV connection | MC4 Quick connection plug | | |
| Battery connection | Terminal connector | | |
| AC connection | Terminal Block | | |
| Display | LCD + Bluetooth + APP | | |
| Communication | CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN | | |

(1) Supporting parallel 140A input. (2) Activation required.