

80-125K

SOLARATOR SERIES

Works with a Wide Range of Batteries: Experience Uninterrupted Power, Even in Areas with Grid Instability

S6-EH3P(80-125)K10-NV-YD-H

Three Phase | High Voltage



12 Unique Advantages

- ★ Supports up to 2x rated PV input, maximizing solar energy utilization
- ★ Supports a maximum string input current of 21A, ensuring compatibility with high-power PV modules
- ★ Compatible with 100-314Ah battery modules, reducing overall system costs
- ★ Supports fast battery charging with a maximum charging current of 200A
- ★ Two independent battery ports for flexible configurations and easy capacity expansion
- ★ Delivers 160% overload for 200ms in off-grid mode, ensuring stable startup of heavy loads
- ★ Offers flexible control for weak grid and genset-hybrid scenarios, reducing investment costs
- ★ AI integration and VPP readiness enable dynamic tariff optimization, minimizing electricity expenses and unlocking additional revenue
- ★ Integrates PV and storage for demand management and anti-reverse flow functions
- ★ Provides dynamic reactive power compensation to improve grid power factor and reduce reactive power charges
- ★ Utility bypass function allows direct grid supply to backup loads
- ★ Patented cooling technology ensures reliable operation even under high-temperature conditions

6 Leading Advantages

- Supports both DC and AC coupling, for flexible retrofits and system expansions
- Ensures reliable backup power across diverse scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
- Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports multi-unit parallel operation up to 1.25MW (Solis STS cabinet recommended for systems over 6 units)

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DATASHEET

| Models | 80K | 99.9K | 100K | 125K |
|--|--|-------------------|-------------------|---|
| Input DC (PV side) | | | | |
| Recommended max. PV array size | 160 kW | 200 kW | 200 kW | 250 kW |
| Max. usable PV input power | 160 kW | 200 kW | 200 kW | 250 kW |
| Max. input voltage | 1000 V | | | |
| Rated voltage | 600 V | | | |
| Start-up voltage | 180 V | | | |
| MPPT voltage range | 150 - 950 V | | | |
| Max. input current | 10 × 42 A | | | |
| Max. short circuit current | 10 × 60 A | | | |
| MPPT number / Max. input strings number | 10 / 20 | | | |
| Battery | | | | |
| Battery type | Li-ion | | | |
| Battery voltage range | 300 - 950 V | | | |
| Max. charge / discharge current | 100 A × 2 / 100 A × 2 | | | |
| Number of battery ports | 2 | | | |
| Max. charge / discharge current of each port | 100 A | | | |
| Communication | CAN / RS485 | | | |
| Output AC (Back-up) | | | | |
| Rated output power | 80 kW | 99.9 kW | 100 kW | 125 kW |
| Max. apparent output power | 1.6 times of rated power, 10 s; 2 times of rated power, 200 ms | | | 1.4 times of rated power, 10 s; 1.6 times of rated power, 200 ms |
| Back-up switch time | < 10 ms | | | |
| Rated output voltage | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V | | | |
| Rated frequency | 50 Hz / 60 Hz | | | |
| THDv (@linear load) | < 3% | | | |
| Input AC (Grid side) | | | | |
| Max. input current | 250 A | | | |
| Input AC (Generator) | | | | |
| Max. input power | 80 kW | 99.9 kW | 100 kW | 125 kW |
| Rated input current | 121.6 A / 115.5 A | 151.8 A / 144.2 A | 151.9 A / 144.3 A | 189.9 A / 180.4 A |
| Rated input voltage | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V | | | |
| Rated input frequency | 50 Hz / 60 Hz | | | |
| Output AC (Grid side) | | | | |
| Rated output power | 80 kW | 99.9 kW | 100 kW | 125 kW |
| Max. apparent output power | 80 kVA | 99.9 kVA | 100 kVA | 125 kVA |
| Rated grid voltage | 3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V | | | |
| Rated grid frequency | 50 Hz / 60 Hz | | | |
| Rated grid output current | 121.6 A / 115.5 A | 151.8 A / 144.2 A | 151.9 A / 144.3 A | 189.9 A / 180.4 A |
| Power factor | > 0.99 (0.8 leading - 0.8 lagging) | | | |
| THDi | < 3% | | | |
| Efficiency | | | | |
| Max. efficiency | 97.5% | | | |
| EU efficiency | 96.9% | 97.1% | 97.1% | 97.2% |
| BAT charged / discharged to AC max. efficiency | 97.0% | | | |
| Protection | | | | |
| Anti-islanding protection | Yes | | | |
| Output over current protection | Yes | | | |
| Short circuit protection | Yes | | | |
| Integrated DC switch | Yes | | | |
| DC reverse-polarity protection | Yes | | | |
| Protection class / Over voltage category | I/ DC II, AC III | | | |
| Surge protection | DC Type II / AC Type II | | | |
| Integrated AFCI 2.0 | Optional | | | |
| General Data | | | | |
| Max. power per phase (grid & back-up) | 26.66 kW | 33.3 kW | 33.33 kW | 41.66 kW |
| Dimensions (W × H × D) | 1174 × 814 × 400 mm | | | |
| Weight | 170 kg | | | |
| Topology | Transformerless | | | |
| Operating ambient temperature range | -25 ~ +60°C | | | |
| Relative humidity | 0 - 100% | | | |
| Ingress protection | IP66 | | | |
| Cooling concept | Intelligent redundant fan-cooling | | | |
| Max. operation altitude | 3000 m | | | |
| Grid connection standard ^① | G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1&2/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,PORTARIA Nº 140, DE 21 DE MARÇO DE 2022 | | | |
| Safety / EMC standard ^① | IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011 | | | |
| Features | | | | |
| PV connection | MC4 Quick connection plug | | | |
| Battery connection | Terminal connector | | | |
| AC connection | Terminal block | | | |
| Display | 7.0" LCD display & Bluetooth + APP | | | |
| Communication interface | Standard: WIFI+LAN+Bluetooth, CAN-BMS × 2, CAN-Parallel × 2, LAN, RS485-Meter, RS485, DRM, DI × 5, DO × 4; Optional: 4G | | | |

① This column only shows the planned certification standards. Please confirm the specific time of obtaining the standards with the local team.