

S6-EH3P(80-100)K10-NV-YD-H

Solis Three Phase High Voltage Energy Storage Inverters

Smart Energy Management

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Adapt to third party VPP platform, frequency service provider

Flexible & Scalable

- Compatible with mainstream lithium batteries
- Support Solis C&I battery solution
- Easily expand system capacity using parallel connections and AC coupling

High Performance

- Supports 100% three-phase unbalanced output
- 200% PV input capacity to maximize solar energy utilization
- Max. 200% overload capability in off-grid mode
- Charging and discharging currents of up to 200A
- Switching time $\leq 10\text{ms}$

Simple & Fast Configuration

- 7-inch LCD screen for an intuitive user experience
- Bluetooth app support for quick and easy setup

Models:

S6-EH3P80K10-NV-YD-H

S6-EH3P100K10-NV-YD-H



DATASHEET

S6-EH3P(80-100)K10-NV-YD-H

Models	80K	100K
Input DC (PV side)		
Recommended max. PV array size	160 kW	200 kW
Max. usable PV input power	160 kW	200 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 × 40 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		200 A / 100 A + 100 A
Number of battery ports		2
Max. charge / discharge current of each port		100 A
Communication		CAN / RS485
Output AC (Grid side)		
Rated output power	80 kW	100 kW
Max. apparent output power	80 kVA	100 kVA
Rated grid voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V
Rated grid frequency		50 Hz / 60 Hz
Rated grid output current	121.6 A / 115.5 A	152 A / 144.3 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)
THDi		< 3%
Input AC (Grid side)		
Max. input current		250 A
Output AC (Back-up)		
Rated output power	80 kW	100 kW
Max. apparent output power		1.2 times of rated power, 10mins; 1.4 times of rated power, 100s; 1.6 times of rated power, 10 s, 2 times of rated power, 200 ms
Back-up switch time		< 10 ms
Rated output voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V
Rated frequency		50 Hz / 60 Hz
THDv (@linear load)		< 2%
Efficiency		
Max. efficiency		97.6%
EU efficiency		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
Surge protection		DC Type II / AC Type II
Integrated AFCI 2.0		Optional
Protection class / Over voltage category		I / II
General Data		
Max. allowable phase imbalance (grid & back-up)		100%
Max. power per phase (grid & back-up)	26.66 kW	33.33 kW
Dimensions (W × H × D)		1174 × 814 × 400 mm
Weight		170 kg
Topology		Transformerless
Operating ambient temperature range		-25 ~ +60°C
Ingress protection		IP66
Cooling concept		Intelligent fan-cooling
Max. operation altitude		3000 m
Grid connection standard	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 N° 140, DE 21 DE MARÇO DE 2022	
Safety / EMC standard	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	CAN, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN	