

DATASHEET

S6-EH3P18K02-NV-YD-L

Models	18K
Input DC (PV side)	
Recommended max. PV array size	36 kW
Max. usable PV input power	28.8 kW
Max. input voltage	1000 V
Rated voltage	550 V
Start-up voltage	160 V
MPPT voltage range	200 - 850 V
Max. input current	42 A / 42 A
Max. short circuit current	50 A / 50 A
MPPT number / Max. input strings number	2 / 4
Battery	
Battery type	Li-ion / Lead-acid
Battery voltage range	40 - 60 V
Max. charge / discharge current	320 A
Number of battery port	2
Max. charge / discharge current of each port	175 A
Communication	CAN / RS485
Output AC (Grid side)	
Rated output power	18 kW
Max. apparent output power	18 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	27.3 A/26.1A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
Input AC (Grid side)	
Max. input current	41 A / 39.2 A
Input Generator	
Max. input power	18 kW
Max. input current	27.3 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 (Back-up)	
Rated output power	18 kW
Max. apparent output power	2 times of rated power, 10 s
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
Rated output current	27.3 A / 26.1 A
Max. continuous output current	27.3 A / 26.1 A
Max. continuous AC passthrough current	50 A
THDv (@linear load)	< 3%
Efficiency	
Max. efficiency	97.5%
EU efficiency	97.0%
BAT charged by PV / AC max. efficiency	95.0% / 94.4%
BAT discharged to AC max. efficiency	94.5%
Protection	
Anti-islanding protection	Yes
Output over current protection	Yes
Short circuit protection	Yes
DC reverse-polarity protection	Yes
Surge protection	DC Type II / AC Type II (Optional)
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)
Integrated AFCI 2.0	Optional
Integrated DC switch	Yes
General Data	
Max. power per phase	40%
Dimensions (W × H × D)	430 × 660 × 305 mm
Weight	42 kg
Topology	Non-isolated
Self-consumption (night)	< 30 W
Operating ambient temperature range	-40 ~ +60°C
Relative humidity	0 - 100%
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, SriLanka, EN 50438L, Vietnam, MEA, PEA, CEI 0-21
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4
Features	
DC connection	MC4 Quick connection plug (PV) & Screw terminal (Battery)
AC connection	Screw terminal
Display	LCD + Bluetooth + APP
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN

Disclaimer:

The above data represents theoretical values obtained under controlled testing conditions in Solis' internal laboratories. Actual performance may vary depending on product variations, software versions, usage conditions, and environmental factors. For accurate performance expectations, please refer to real-world usage scenarios. Solis reserves the right to modify the products and their information contained herein without prior notice. Please refer to the latest product information for details.