

Solis-80K-5G, Solis-100K-HV-5G Solis-110K-BHV-5G

Solis Three Phase Inverters



Features:

- ▶ Over 99% Max. efficiency
- ▶ Wide voltage range and low startup voltage
- ▶ 9/10 MPPT design with precise MPPT algorithm
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, supporting over 6MW paralleled in one transformer
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundant fan-cooling
- ▶ Strings intelligent monitoring, Smart I-V Curve Diagnosis supported
- ▶ Fuse free design to avoid fire hazard
- ▶ Type II surge arrester for both DC and AC, type I surge arrester optional
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Optional anti-PID function integrated
- ▶ Integrated DC switches, AC switch optional



Model:

400V: Solis-80K-5G

480V: Solis-100K-HV-5G

540V: Solis-110K-BHV-5G

Datasheet

Model Name	Solis-80K-5G	Solis-100K-HV-5G	Solis-110K-BHV-5G
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Input DC

Max. input voltage	1100V		
Rated voltage	600V		
Start-up voltage	195V		
MPPT voltage range	180-1000V		
Max. input current	9*26A	10*26A	
Max. short circuit current	9*40A	10*40A	
MPPT number/Max. input strings number	9/18	10/20	

Output AC

Rated output power	80kW	100kW	110kW
Max. apparent output power	88kVA	110kVA	121kVA
Max. output power	88kW	110kW	121kW
Rated grid voltage	3/N/PE, 220/380V, 230/400V	3/PE, 480V	3/PE, 540V
Rated grid frequency	50/60Hz		
Rated grid output current	121.6A	120.3A	117.6A
Max. output current	133.7A	132.3A	129.4A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)		
THDi	<3%		

Efficiency

Max. efficiency	98.7%	99.0%
EU efficiency	98.3%	98.5%

Protection

DC reverse-polarity protection	Yes
Short circuit protection	Yes
Output over current protection	Yes
Surge protection	DC Type II / AC Type II (AC Type I optional)
Grid monitoring	Yes
Anti-islanding protection	Yes
Strings monitoring	Yes
I/V Curve scanning	Yes
Anti-PID function	Optional
Integrated AFCI (DC arc-fault circuit protection)	Optional
Integrated DC switch	Yes
Integrated AC switch	Optional

General Data

Dimensions (W*H*D)	1050*567*314.5 mm (with AC switch)
Weight	82kg
Topology	Transformerless
Self consumption	<2W (night)
Operating ambient temperature range	-25 ~ +60°C
Relative humidity	0-100%
Ingress protection	IP66
Cooling concept	Intelligent redundant fan-cooling
Max. operation altitude	4000m
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC 61727, DEWA
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, EN 61000-6-2/-4

Features

DC connection	MC4 connector
AC connection	OT terminal (max. 185 mm ²)
Display	LCD, 2x20 Z
Communication	RS485, Optional: Wi-Fi, GPRS, PLC