

Solis-(25-50)K-5G

Solis Three Phase Inverters



360 degree

Features:

- ▶ Max. efficiency 98.8%
- ▶ Wide voltage range and low startup voltage
- ▶ 3/4 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
- ▶ 150% DC overload ratio, 13A input for each PV string
- ▶ Intelligent string monitoring, smart I-V curve scan
- ▶ Fuse free design to avoid fire hazard
- ▶ Type II surge arrester for both DC and AC
- ▶ Natural convection, Fan-less design, longer lifespan
- ▶ AFCI protection, proactively reduces fire risk
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Integrated Export Power Manager (EPM)



Model:

400V: Solis-25K-5G Solis-30K-5G
 Solis-33K-5G Solis-40K-5G
480V: Solis-40K-HV-5G Solis-50K-HV-5G

Datasheet

Model Name	Solis-25K-5G	Solis-30K-5G	Solis-33K-5G	Solis-40K-5G	Solis-40K-HV-5G	Solis-50K-HV-5G
Input DC						
Recommended max. PV power	37.5 kW	45 kW	49.5 kW	60 kW	60 kW	75 kW
Max. input voltage	1100 V					
Rated voltage	600 V					
Start-up voltage	180 V					
MPPT voltage range	200-1000 V					
Max. input current	26 A / 26 A / 26 A			4*26 A		
Max. short circuit current	40 A / 40 A / 40 A			4*40 A		
MPPT number/Max. input strings number	3/6			4/8		
Output AC						
Rated output power	25 kW	30 kW	33 kW	40 kW	40 kW	50 kW
Max. apparent output power	27.5 kVA	33 kVA	36.3 kVA	44 kVA	44 kVA	55 kVA
Max. output power	27.5 kW	33 kW	36.3 kW	44 kW	44 kW	55 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V				3/PE, 480 V	
Rated grid frequency	50 Hz / 60 Hz					
Rated grid output current	38.0 A / 36.1 A	45.6 A / 43.3 A	50.1 A / 47.6 A	60.8 A / 57.7 A	48.1 A	60.1 A
Max. output current	41.8 A	50.2 A	55.1 A	66.9 A	53.0 A	66.2 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)					
THDi	<3%					
DC injection current	<0.5% In					
Efficiency						
Max. efficiency	98.8%					
EU efficiency	98.3%					
Prot ection						
DC reverse-polarity protection	Yes					
Short circuit protection	Yes					
Output over current protection	Yes					
Surge protection	DC Type II / AC Type II					
Grid monitoring	Yes					
Anti-islanding protection	Yes					
Temperature protection	Yes					
Strings monitoring	Yes					
I/V Curve scanning	Yes					
Integrated PID recovery	Optional					
Integrated AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾					
Integrated DC switch	Yes					
General Data						
Dimensions (W*H*D)	647*629*252 mm					
Weight	45 kg					
Topology	Transformerless					
Self consumption (night)	<1 W					
Operating ambient temperature range	-25 ~ +60°C					
Relative humidity	0-100%					
Ingress protection	IP65					
Noise emission (typical)	≤30 dB(A)					
Cooling concept	Natural convection					
Max. operation altitude	4000 m					
Grid connection standard	IEC 61683, IEC 60068, IEC 61727, IEC 62116, EN 50530, IS 16169 / IS 16221(BIS)					
Safety/EMC standard	IEC 62109-1/-2, IEC 61000-6-1/-2/-3/-4					
Features						
DC connection	MC4 connector					
AC connection	Screw type terminal block					
Display	LCD					
Communication	RS485, Optional: DLS-W, DLS-G					

(1) Activation required.