

Solis Three Phase Inverters

» S5-GR3P(3-20)K



360 degree

Efficient

- ▶ Max. efficiency 98.7%
- ▶ String current up to **16A**
- ▶ Wide voltage range and low startup voltage

Smart

- ▶ Supports export power control
- ▶ Supports RS485, WIFI, GPRS
- ▶ Scan to register on SolisCloud, supports remote upgrade and control

Safe

- ▶ IP66
- ▶ AFCI protection, proactively reduces fire risk
- ▶ Automatic voltage stabilization technology in weak grid conditions

Economic

- ▶ Compact design, simple installation and maintenance
- ▶ > 150% DC/AC ratio
- ▶ Supports high power modules for lower installation costs

Model:

S5-GR3P3K S5-GR3P4K S5-GR3P5K S5-GR3P6K S5-GR3P8K S5-GR3P9K S5-GR3P10K
S5-GR3P12K S5-GR3P13K S5-GR3P15K S5-GR3P17K S5-GR3P20K

Datasheet

Model Name	SS-GR3P3K	SS-GR3P4K	SS-GR3P5K	SS-GR3P6K	SS-GR3P8K	SS-GR3P9K	SS-GR3P10K	SS-GR3P12K	SS-GR3P13K	SS-GR3P15K	SS-GR3P17K	SS-GR3P20K	
Input DC													
Recommended max. PV power	4.5 kW	6 kW	7.5 kW	9 kW	12 kW	13.5 kW	15 kW	18 kW	19.5 kW	22.5 kW	25.5 kW	30 kW	
Max. input voltage	1100 V												
Rated voltage	600 V												
Start-up voltage	180 V												
MPPT voltage range	160-1000 V												
Max. input current	16 A / 16 A						32 A / 32 A						
Max. short circuit current	20 A / 20 A						40 A / 40 A						
MPPT number/Max. input strings number	2/2						2/4						
Output AC													
Rated output power	3 kW	4 kW	5 kW	6 kW	8 kW	9 kW	10 kW	12 kW	13 kW	15 kW	17 kW	20 kW	
Max. apparent output power	3.3 kVA	4.4 kVA	5.5 kVA	6.6 kVA	8.8 kVA	9.9 kVA	11 kVA	13.2 kVA	14.3 kVA	16.5 kVA	18.7 kVA	22 kVA	
Max. output power	3.3 kW	4.4 kW	5.5 kW	6.6 kW	8.8 kW	9.9 kW	11 kW	13.2 kW	14.3 kW	16.5 kW	18.7 kW	22 kW	
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	4.6 A / 4.3 A	6.1 A / 5.8 A	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	13.7 A / 13.0 A	15.2 A / 14.4 A	18.2 A / 17.3 A	19.8 A / 18.8 A	22.8 A / 21.7 A	25.8 A / 24.6 A	30.4 A / 28.9 A	
Max. output current	4.7 A	6.4 A	7.9 A	9.5 A	12.7 A	14.3 A	15.9 A	19.1 A	20.7 A	23.8 A	27 A	31.8 A	
Power Factor	>0.99 (0.8 leading - 0.8 lagging)												
THDI	<2%												
Efficiency													
Max. efficiency	98.3%				98.5%				98.6%				98.7%
EU efficiency	97.7%				97.9%				98.0%				98.1%
Protection													
DC reverse-polarity protection	Yes												
Short circuit protection	Yes												
Output over current protection	Yes												
Surge protection	Yes												
Grid monitoring	Yes												
Anti-islanding protection	Yes												
Temperature protection	Yes												
Integrated AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾												
Integrated DC switch	Optional												
General Data													
Dimensions (W*H*D)	310*563*219 mm												
Weight	17.8 kg						18.8 kg			20 kg			
Topology	Transformerless												
Self consumption (night)	<1 W												
Operating ambient temperature range	-25 ~ +60°C												
Relative humidity	0-100%												
Ingress protection	IP66												
Cooling concept	Natural convection						Intelligent redundant fan-cooling						
Max. operation altitude	4000 m												
Grid connection standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIPS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530												
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4												
Features													
DC connection	MC4 connector												
AC connection	Quick connection plug												
Display	LCD												
Communication	RS485, Optional: Wi-Fi, GPRS												

(1) Activation required.