

S5-GR3P(3-20)K

Solis Three Phase Inverters



360 degree

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

Efficient

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

Safe

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

Smart

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

Economic

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

Datasheet

Model Name	S5-GR3P3K	S5-GR3P4K	S5-GR3P5K	S5-GR3P6K	S5-GR3P8K	S5-GR3P9K	S5-GR3P10K	S5-GR3P12K	S5-GR3P13K	S5-GR3P15K	S5-GR3P17K	S5-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	25 A / 25 A						50 A / 50 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, EIFS 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.