

S5-GR3P(5-20)K

Solis Three Phase Grid-Tied Inverters

Efficient

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

Smart

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

Safe

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

Economic

- Compact design with easy maintenance and installation
- > 130% DC/AC ratio
- Support large module with lower installation cost

Models:

S5-GR3P5K-AU / S5-GR3P6K-AU

S5-GR3P8K-AU / S5-GR3P9K-AU

S5-GR3P10K-AU / S5-GR3P12K

S5-GR3P13K / S5-GR3P15K

S5-GR3P17K / S5-GR3P20K



360° View



DATASHEET

S5-GR3P(5-20)K

Models	5K-AU	6K-AU	8K-AU	9K-AU	10K-AU	12K	13K	15K	17K	20K	
Input DC											
Recommended max. PV power	6.7 kW	8 kW	10.6 kW	12 kW	13.3 kW	16 kW	17.3 kW	20 kW	22.6 kW	26.6 kW	
Max. input voltage	1100 V										
Rated voltage	600 V										
Start-up voltage	180 V										
MPPT voltage range	160 - 1000 V										
Max. input current	32 A / 16 A								32 A / 32 A		
Max. short circuit current	40 A / 20 A								40 A / 40 A		
MPPT number / Max. input strings number	2 / 2								2 / 4		
Output AC											
Rated output power	5 kW	6 kW	8 kW	9 kW	10 kW	12 kW	13 kW	15 kW	17 kW	20 kW	
Rated apparent output power	5 kVA	6 kVA	8 kVA	9 kVA	10 kVA	12 kVA	13 kVA	15 kVA	17 kVA	20 kVA	
Max. apparent output power	5 kVA	6 kVA	8 kVA	9 kVA	10 kVA	12 kVA	13 kVA	15 kVA	17 kVA	20 kVA	
Max. output power	5 kW	6 kW	8 kW	9 kW	10 kW	12 kW	13 kW	15 kW	17 kW	20 kW	
Rated grid voltage	3/N/PE, 230 V / 400 V										
Rated grid frequency	50 Hz										
Rated grid output current	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	
Max. output current	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										
Multi peak scan	Yes										
Integrated AFCI 2.0	Optional										
Integrated DC switch	Yes (PV2 Switch)										
General Data											
Dimensions (W × H × D)	310 × 563 × 219 mm										
Weight	18.9 kg							19.6 kg		20.8 kg	
Topology	Transformerless										
Self-consumption (night)	< 1 W										
Operating ambient temperature range	-25 ~ +60°C										
Relative humidity	0 - 100%										
Ingress protection	IP66										
Noise emission (typical)	< 60 dB(A)										
Cooling concept	Intelligent fan-cooling										
Max. operation altitude	2000 m										
Grid connection standard	AS/NZS 4777.2:2020, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530										
Safety / EMC standard	IEC 62109-1/-2, IEC 61000-6-1/-2/-3/-4										
Features											
DC connection	MC4 connector										
AC connection	Quick connection plug										
Display	LCD										
Communication	RS485, Optional: Wi-Fi, GPRS										
Country of manufacture	China										