

S5-GR3P(3-20)K

Solis Three Phase Grid-Tied Inverters

Features:

- Max. efficiency 98.7%
- > 150% DC/AC ratio
- Supports export power control
- AFCI protection, proactively reduces fire risk
- 24-hour load consumption monitoring
- Adaptive weak grid
- IP66

Models:

S5-GR3P3K / S5-GR3P4K

S5-GR3P5K / S5-GR3P6K

S5-GR3P8K / S5-GR3P9K

S5-GR3P10K / S5-GR3P12K

S5-GR3P13K / S5-GR3P15K

S5-GR3P17K / S5-GR3P20K



360° View

DATASHEET
S5-GR3P(3-20)K

Models	3K	4K	5K	6K	8K	9K	10K	12K	13K	15K	17K	20K	
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												
Multi peak scan	Yes												
Temperature protection	Yes												
Integrated AFCI 2.0	Optional												
Integrated DC switch	Yes												
General Data													
Dimensions (W × H × D)	310 × 563 × 219 mm												
Weight	16.5 kg	16.9 kg			17.9 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)	< 30 dB(A)						< 60 dB(A)						
Cooling concept	Natural cooling						Intelligent fan-cooling						
Max. operation altitude	4000 m												
Grid connection standard	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, 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												