

## 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
<b>Input DC</b>												
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					
<b>Output AC</b>												
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
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%											
<b>Efficiency</b>												
Max. efficiency	98.3%			98.5%			98.6%			98.7%		
EU efficiency	97.7%			97.9%			98.0%			98.1%		
<b>Protection</b>												
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											
<b>General Data</b>												
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											
<b>Features</b>												
DC connection	MC4 connector											
AC connection	Quick connection plug											
Display	LCD											
Communication	RS485, Optional: Wi-Fi, GPRS											