

## S5-GR3P(3-20)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

- 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

### 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	
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%												
<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												