

## 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

- 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-GR3P5K / S5-GR3P6K

S5-GR3P8K / S5-GR3P10K

S5-GR3P12K / S5-GR3P13K

S5-GR3P15K / S5-GR3P17K

S5-GR3P20K



360° View



# DATASHEET

## S5-GR3P(5-20)K

Models	5K	6K	8K	10K	12K	13K	15K	17K	20K	
<b>Input DC</b>										
Recommended max. PV power	7.5 kW	9 kW	12 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	5 kW	6 kW	8 kW	10 kW	12 kW	13 kW	15 kW	17 kW	20 kW	
Max. apparent output power	5.5 kVA	6.6 kVA	8.8 kVA	11 kVA	13.2 kVA	14.3 kVA	16.5 kVA	18.7 kVA	22 kVA	
Max. output power	5.5 kW	6.6 kW	8.8 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	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 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	7.9 A	9.5 A	12.7 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%									
DC injection current	< 0.5% I <sub>n</sub>									
<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					
Insulation resistance monitoring					Yes					
Residual current detection					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	16.9 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	IEC 61683, IEC 60068, IEC 61727, IEC 62116, EN 50530, IS 16169/IS 16221(BIS)									
Safety / EMC standard	IEC 62109-1/-2, IEC 61000-6-1/-2/-3/-4									
<b>Features</b>										
DC connection	MC4 connector									
AC connection	Quick connection plug									
Display	LCD									
Communication	RS485, Optional: S3-WiFi-ST, S3-GRPS-ST									