

S5-GR3P(5-20)K-AU

Solis Three Phase Inverters



360 degree

Model:

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

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

Datasheet

Model Name	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
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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
Integrated DC switch	Yes (PV2 Switch)
Integrated AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾

General Data

Dimensions (W*H*D)	310*563*219 mm		
Weight	17.8 kg	18.8 kg	20 kg
Topology	Transformerless		
Self consumption (night)	<1 W		
Operating ambient temperature range	-25 ~ +60°C		
Relative humidity	0-100%		
Ingress protection	IP66		
Cooling concept	Intelligent redundant 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

(1) Activation required.