

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-GR3P10K

S5-GR3P20K



360° View



DATASHEET

S5-GR3P(5-20)K

Models	5K	10K	20K
Input DC			
Recommended max. PV power	7.5 kW	15 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	5 kW	10 kW	20 kW
Max. apparent output power	5.5 kVA	11 kVA	22 kVA
Max. output power	5.5 kW	11 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	15.2 A / 14.4 A	30.4 A / 28.9 A
Max. output current	7.9 A	15.9 A	31.8 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)		
THDi	<2%		
Efficiency			
Max. efficiency	98.3%	98.5%	98.7%
EU efficiency	97.7%	97.9%	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 AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾		
Integrated DC switch	Optional		
General Data			
Dimensions (W*H*D)	310*563*219 mm		
Weight	17.8 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	Natural convection	Intelligent redundant 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, MEA, PEA		
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		

(1) Activation required.