



S6-GR1P(2.5-6)K-S

Single Phase | Grid-Tied Inverters



- String current up to 16A
- Compact design for easy installation
- Supports export power control
- 24-hour load consumption monitoring
- AFCI protection, proactively reduces fire risk
- Adaptive weak grid



DATASHEET

S6-GR1P(2.5-6)K-S

Models	2.5K	3K	3.6K	4K	4.6K	5K	6K
Input DC							
Recommended max. PV power	3.75 kW	4.5 kW	5.4 kW	6 kW	6.9 kW	7.5 kW	9 kW
Max. input voltage	550 V						
Rated voltage	250 V	330 V					
Start-up voltage	60 V	100 V					
MPPT voltage range	50 - 550 V	90 - 550 V					
Max. input current	16 A / 16 A						
Max. short circuit current	22 A / 22 A						
MPPT number / Max. input strings number	2 / 2						
Output AC							
Rated output power	2.5 kW	3 kW	3.6 kW	4 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	2.5 kVA	3 kVA	3.6 kVA	4 kVA	4.6 kVA	5 kVA	6 kVA
Max. output power	2.5 kW	3 kW	3.6 kW	4 kW	4.6 kW	5 kW	6 kW
Rated grid voltage	1/N/PE, 220 V / 230 V						
Rated grid frequency	50 Hz / 60 Hz						
Rated grid output current	11.4 A / 10.9 A	13.6 A / 13 A	16 A / 15.7 A	18.2 A / 17.4 A	20.9 A / 20 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	11.4 A	13.6 A	16 A	18.2 A	20.9 A	22.7 A	27.3 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)						
THDi	< 3%						
Efficiency							
Max. efficiency	97.3%	97.3%		97.6%		97.7%	
EU efficiency	96.5%	96.6%		97.1%		97.1%	
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						
Multi peak scan	Yes						
Integrated AFCI 2.0	Optional						
Integrated DC switch	Yes						
General Data							
Dimensions (W × H × D)	330 × 371 × 161 mm						
Weight	8.2 kg	8.3 kg		8.9 kg		9 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)	< 20 dB(A)						
Cooling concept	Natural cooling				Natural cooling with internal fan		
Max. operation altitude	4000 m						
Grid connection standard	G98 or 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, IEC60068, IEC 61683, EN 50530, MEA, PEA						
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-3						
Features							
DC connection	MC4 connector						
AC connection	Quick connection plug						
Display	LED digital display & Bluetooth + APP						
Communication	RS485, USB, Optional: Wi-Fi, GPRS						