

DATASHEET

S5-GR3P(12-20)K(21A)

Models	12K	15K	17K	20K
Input DC				
Recommended max. PV power	18 kW	22.5 kW	25.5 kW	30 kW
Max. input voltage	1100 V			
Rated voltage	600 V			
Start-up voltage	160 V			
MPPT voltage range	160 - 1000 V			
Max. input current	32 A / 21 A		42 A / 32 A	
Max. short circuit current	40 A / 26.3 A		52.5 A / 40 A	
MPPT number / Max. input strings number	2 / 3		2 / 4	
Output AC				
Rated output power	12 kW	15 kW	17 kW	20 kW
Max. apparent output power	12 kVA	15 kVA	17 kVA	20 kVA
Max. output power	12 kW	15 kW	17 kW	20 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	18.2 A / 17.3 A	22.8 A / 21.7 A	25.8 A / 24.6 A	30.4 A / 28.9 A
Max. output current	18.2 A / 17.3 A	22.8 A / 21.7 A	25.8 A / 24.6 A	30.4 A / 28.9 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Efficiency				
Max. efficiency	98.5%	98.6%	98.7%	
EU efficiency	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	
I/V Curve scanning			Yes	
Multi peak scan			Yes	
Integrated AFCI 2.0			Optional	
Integrated DC switch			Yes	
General Data				
Dimensions (W × H × D)	310 × 518 × 219 mm			
Weight	19 kg		20.7 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)	< 40 dB(A)		< 50 dB(A)	
Cooling concept	Natural cooling with internal fan		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, TOR, 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			
Features				
DC connection	MC4 connector			
AC connection	Quick connection plug			
Display	LCD			
Communication	RS485, Optional: Wi-Fi, GPRS			