

11 Appendix

11.1 Technical Data

Parameters	SG30KU	SG36KU
Input Side Data		
Max. PV input power	34100W	41000W
Max. input voltage	1000Vdc	
Startup voltage	300V	
Nominal input voltage	710V	
MPP voltage range	280...950Vdc	
MPP voltage range for nominal power	480...850Vdc	560...850Vdc
No. of MPPT(s)	2	
Max. number of PV strings per MPPT	5	
Max. PV input current(DC1/DC2)	33A*2	
Max. input current for input connector	12A	
Short-circuit current of PV input	60A*2	
Output Side Data		
Nominal AC output power	30000W	36000W
Max. AC output power(PF=1)	33240W	39800W
Max. AC output apparent power	33240VA	39800VA
Max. AC output current	40A	48A
Nominal AC voltage	480Vac	
AC voltage range	422...528Vac	
Number of Phases	3Ø/3W or 4W+Ground	
Normal output frequency	60Hz	
Grid frequency range	57...63Hz	
THD	< 3 % (at nominal power)	
DC current injection	<0.5%In	
Power factor	>0.99 default value at nominal power (adj. 0.8 overexcited...0.8 underexcited)	
Protection		
Anti-islanding protection	Yes	
LVRT	Yes	
AC short circuit protection	Yes	
Leakage current protection	Yes	
DC switch	Integrated	
DC fuse	Integrated	

Parameters	SG30KU	SG36KU
Overvoltage protection	Type III surge arrester (Optional Type II DIN rail surge arrester)	
AC switch	Optional	
System data		
Max. efficiency	98.5%	
CEC efficiency	98.0%	
Isolation method	Transformerless	
Ingress protection rating	NEMA4X	
Night power consumption	<1W	
Operating ambient temperature range	-25... + 60°C (>45°C derating) -13...+140°F(>113°F derating)	
Allowable relative humidity range	0...100%	
Cooling method	Smart forced air cooling	
Max. operating altitude	4000m (>3000m derating) 13123ft(>9842ft derating)	
Display	Graphic LCD	
Communication	RS485	
DC connection type	Screw terminals	
AC connection type	Spring clamp terminal	
Certification	cCSAus	
Safety and EMC Standard	UL 1741, IEEE 1547, IEEE1547.1,CSA C22.2 107.1-01-2001,FCC Part 15 Sub-part B Class B Limits	
Mechanical Data		
Dimensions (W×H×D)	622×880×250mm 25" × 34.6" × 9.8"	
Mounting method	Wall bracket or Floor bracket	
Weight	65kg	