## 9 Appendix

## 9.1 Technical Data

Parameters	SG2KTL-S	SG3KTL-S	SG3KTL-D	SG5KTL-D	
Input Side Data					
Max. PV input power	3000W	4000 W	4000 W	6500W	
Max. PV input voltage	600 V				
Startup voltage	120 V				
Nominal input voltage	360 V				
MPP voltage range	110560 V				
MPP voltage range for nominal power	210480 V	310480 V	150480 V	260480 V	
No. of MPPTs	1		2		
Max. number of PV strings per MPPT	1		1		
Max. PV input current (DC1/DC2)	10 A		20 A (10 A/10 A)		
Max. current for input connector	12 A		24 A (12 A/12 A)		
Short-circuit current of PV input (DC1/DC2)	12 A		24 A (12 A/12 A)		
Output Side Data					
Nominal AC output power	2000 W	3000 W	3000 W	5000 W/ 4990 W * (cosΦ=1)	
Max. AC output apparent power	2000 VA	3000 VA	3000 VA	5000 VA/ 4990 VA*	
Max. AC output current	9.1 A	13.6 A	13.6 A	21.7 A/ 22.7 A *	
Nominal AC voltage	220 Vac/230 Vac (Single phase)				
AC voltage range	180276 Vac (this may vary with grid standards)				
Nominal grid frequency	50 Hz/60 Hz				
Grid frequency range	4555 Hz/5565 Hz (this may vary with grid standards)				
THD	<3% (of nominal power)				
DC current injection	<0.5% (of nominal current)				
Power factor	>0.99 @ default value at nominal power (adj. 0.8 over-excited~0.8 under-excited)				

9 Appendix

Parameters	SG2KTL-S	SG3KTL-S	SG3KTL-D	SG5KTL-D	
Protection				•	
Anti-islanding	Yes				
protection					
AC short circuit	Yes				
protection					
Leakage current	Yes				
protection					
LVRT	No				
DC reverse connection	No				
protection					
DC switch	Optional				
DC fuse	No				
Overvoltage protection	Varistors				
System Data	•	1	•	T	
Max. efficiency	97.4%	97.5%	97.4%	97.5%	
Max. European	96.6%	97.0%	96.9%	97.1%	
efficiency			1 2012 / 0	271170	
Isolation method	Transformerless				
Ingress protection	IP65				
rating	414				
Night power	<1 W				
consumption Operating ambient					
temperature range	-25°C+60°C ( > 45°C derating)				
Allowable relative	0100%				
humidity range	J10070				
Cooling method	Natural cooling				
Max. operating altitude	2000 m				
D: 1	LED indicator,				
Display	LCD (optional, see communication options below)				
	Optional:  • eShow (LCD)				
	• eShow+ (LCD + Wi-Fi)				
• ZE100 (LCD + Wi-Fi + energy meter for zero-expor					
	GPRS (for China & Europe)				
	Remark:				
	Built-in earth fault alarm on eShow, eShow+ and ZE100.				
DC Terminals	MC4				
AC Terminals	Plug and play				
	IEC61000-6-2, IEC61000-6-3, AS4777.2, IEC62109-1,				
Certification	IEC62109-2, VDE-AR-N-4105, VDE0126-1-1, G59/3, G83/2,				
	C10/11, EN504	438, NB/T 32004	,GB/T29319, K	S C8564:2015;	

User Manual 9 Appendix

Parameters	SG2KTL-S	SG3KTL-S	SG3KTL-D	SG5KTL-D	
	CE, CGC, TUV, SAA, KTC				
Mechanical Data					
Dimensions (W x H x D)	300 mm x 370 mm x 125		360 mm x 390 mm x 133		
	mm		mm		
Mounting method	Wall-mounting bracket				
Weight	9 kg		11 kg	•	

<sup>\*</sup> When the country code of SG5KTL-D is set to "AU" (Australia), the nominal output power is 4990 W (VA) and the max. output current is 21.7 A (230 Vac).

## 9.2 Exclusion of Liability

The content of these documents is periodically checked and revised where necessary. Discrepancies therefore may exist. Readers are cautioned that SUNGROW reserves the right to make changes without notice. Please call us or visit our website at <a href="www.sungrowpower.com">www.sungrowpower.com</a> for the latest information. No guarantee is made for the completeness of these documents. Please contact our company or distributors to get the latest version.

Guarantee or liability claims for damage of any kind are excluded if they are caused by one or more of the following:

- improper or inappropriate use or install of the product;
- installing or operate the product in unintended environment;
- installing or operate the product without observing relevant safety regulations in the deployment location;
- ignoring the safety warnings or instructions contained in all documents relevant to the product;
- installing or operate the product under incorrect safety or protection conditions;
- altering the product or supplied software without authority;
- the product faults due to operation attached or neighboring devices beyond of allowed limit values; and
- damage caused by the natural environment beyond the rated operating range of the inverter.

The use of supplied software produced by SUNGROW is subject to the following conditions: