

# SG 8 / 10 / 12 KTL-EC



www.sungrowpower.com



## Efficient and flexible

- Flexible design due to dual MPP tracking that is equipped to obtain full nominal power, 3-phase supply
- High energy yield due to maximum efficiency up to 98%



## Abundant Functions

- Integrated intelligent management for household appliances (DO function), a substantial increase in the rate of self-consumption
- Integrated power management function, easy to receive the adjustable command from grid
- Extensive communication: RS-485, Ethernet, 4 digital inputs for ripple control receivers, 2 digital outputs for controlling internal consumption



## Intelligent design

- Low noise level and internal consumption due to natural cooling
- Integrated theft protection

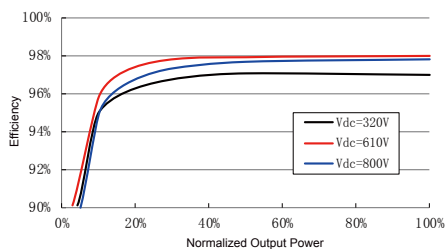


## Reliable

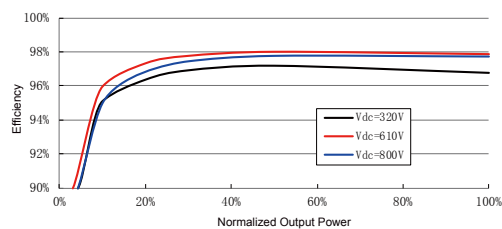
- Product certification: TÜV, VDE 0126-1-1, EN 62109-1/-2, CE, CEI 0-21 and G59/3, VDE-AR-N 4015
- Manufacturer certification: ISO 9001, ISO 14001, OHSAS 18000

## Efficiency Curve

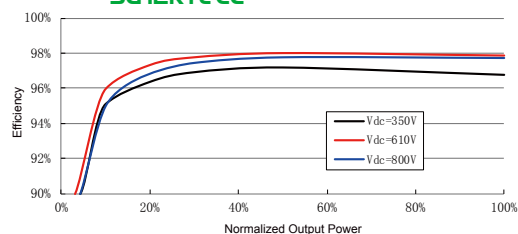
SG 8KTL-EC



SG 10KTL-EC



SG 12KTL-EC



Input Side Data	SG 8KTL-EC	SG 10KTL-EC	SG 12KTL-EC
Max. PV input power	8440W	10550W	12650W
Max. PV input voltage	1000V		
Startup voltage	250V		
Nominal input voltage	610V		
MPP voltage range	200~900V		
MPP voltage range for nominal power	320~800V	320~800V	350~800V
No. of MPPTs	2		
Max. number of PV strings per MPPT	3/1		
Max. PV input current	33A (22A/11A)	33A (22A/11A)	36A (24A/12A)
Max. current for input connector	12A		
Short-circuit current of PV input	42A (28A/14A)	42A (28A/14A)	45A (30A/15A)

### Output Side Data

Nominal AC output power	8000W	10000W	12000W
Max. AC output power (PF=1)	8000W	10000W	12000W
Max. AC output apparent power	8000VA	10526VA	13300VA
Max. AC output current	11.6A	15.3A	19.3A
Nominal AC voltage	3/N/PE, 230/400Vac		
AC voltage range	310~480Vac (May vary as per corresponding country's grid standard)		
Nominal grid frequency	50Hz		
Grid frequency range	45~55Hz (May vary as per corresponding country's grid standard)		
THD	<3% (Nominal power)		
DC current injection	<0.5% I <sub>n</sub>		
Power factor	>0.99@default value at nominal power, (adj. 0.8 leading ~ 0.8 lagging)		

### Protection

Anti-islanding protection	Yes
LVRT	No
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
DC switch	Integrated
DC fuse	No
Overvoltage protection	III

### System Data

Max. efficiency	98.0%	98.0%	98.0%
Max. European efficiency	97.5%	97.6%	97.5%
Isolation method	Transformerless		
Ingress protection rating	IP65		
Night power consumption	<1W		
Operating ambient temperature range	-25~60°C (>45°C derating)		
Allowable relative humidity range	0~100%		
Cooling method	Natural cooling		
Noise	≤ 29dB	≤ 29dB	≤ 35dB
Max. operating altitude	2000m		
Display	Graphic LCD		
Communication	2 × Ethernet, 2 × RS485 (RJ45 connector), 4 × Digital Inputs, 2 × Digital outputs		
DC connection type	MC4		
AC connection type	Plug and play connector		
Certification	VDE0126-1-1, EN62109-1, EN62109-2, G83/1, VDE-AR-N-4105, CEI 0-21		

### Mechanical Data

Dimensions (W*H*D)	535*710*220mm		
Mounting method	Wall bracket		
Weight	36kg	36kg	45kg

### Circuit Diagram

