

SG 8 / 10 / 12 KTL-EC

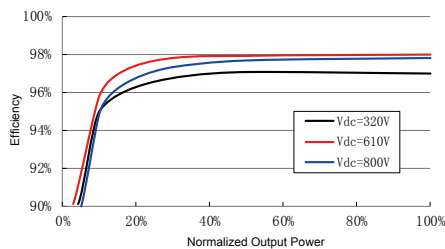


Intelligent Residential PV System Solution

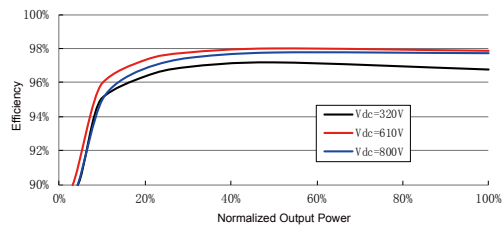
- Asymmetry dual MPPT, available for working in individual and parallel modes, flexible and adaptable to all kinds of residential rooftop
- Integrated combining, data collection and monitoring functions, less devices needed, less initial cost
- Integrated home energy management system. More revenue of generation
- Fanless design, maintenance free
- Max. efficiency at 98.0%, natural cooling, less energy consumption

Efficiency Curve

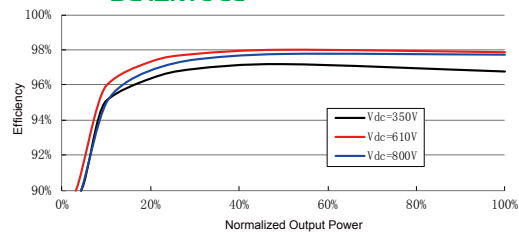
SG 8KTL-EC



SG 10KTL-EC



SG 12KTL-EC



Input Side Data	SG 8KTL-EC	SG 10KTL-EC	SG 12KTL-EC
Max. PV input power	8440W (5627W/2813W)	10550W (7033W/3517W)	12650W (8433W/4217W)
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	27A (18A/9A)	33A(22A/11A)	36A(24A/12A)
Max. current for input connector	10A		
Short-circuit current of PV input	35A (23A/12A)	42A(28A/14A)	45A(30A/15A)

Output Side Data	SG 8KTL-EC	SG 10KTL-EC	SG 12KTL-EC
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% In		
Power factor	>0.99@default value at nominal power, (adj. 0.8overexcited ~0.8underexcited)		

Protection	SG 8KTL-EC	SG 10KTL-EC	SG 12KTL-EC
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		Optional
Overvoltage protection	III		Type II PCB mounted surge arrester (optional)

System Data	SG 8KTL-EC	SG 10KTL-EC	SG 12KTL-EC
Max. efficiency	98.0%	98.0%	98.0%
Max. European efficiency	97.5%	97.6%	97.3%
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	0~95% non- condensing		
Cooling method	Natural cooling		
Noise	≤29dB	≤29dB	≤35dB
Max. operating altitude	2000m		
Display	Graphic LCD		
Communication	Ethernet, RS485 (RJ45 connector), 4 × Digital Inputs		
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		

Mechanical Data	SG 8KTL-EC	SG 10KTL-EC	SG 12KTL-EC
Dimensions (W*H*D)	535*710*220mm		
Mounting method	Wall bracket		
Weight	36kg	36kg	45kg

Circuit Diagram

