

SG 3 / 4 / 4.6 / 5KTL-M



Grid-friendly

- Active power continuously adjustable (0 - 100%)
- Reactive power control with power factor adjustment from 0.8 overexcited to 0.8 underexcited



Efficient

- Max. efficiency at 97.4%/97.6%
- Wide DC input voltage range, max. 550V



Flexible

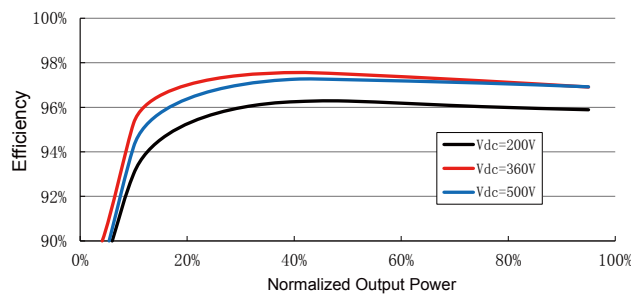
- Dural-MPPT, wide MPP voltage range
- Multi-communication methods, RS485 and WiFi (opt.)
- DC switch, safe and convenient for maintenance



Qualified

- TÜV, CE, AS4777, AS/NZS 3100, VDE AR N 4105 certified

Efficiency Curve



Input Side Data	SG 3KTL-M	SG 4KTL-M	SG 4K6TL-M	SG 5KTL-M
Max. PV input power	3000W	4000W	4600W (cos Φ =1)	4600W
Max. PV input voltage	550V			
Startup voltage	150V			
Nominal input voltage	370V			
MPP voltage range	125~550V			
MPP voltage range for nominal power	160~500V	170~500V	195~500V	200~500V
No. of MPPTs	2			
Max. number of PV strings per MPPT	1/1	1/2	1/2	1/2
Max. PV input current	20A (10A/10A)	26A (10A/16A)	26A (10A/16A)	26A (10A/16A)
Max. current for input connector	10A			

Output Side Data

Nominal AC output power	3000W	4000W	4600W (cos Φ =1)	4600W
Max AC output power (PF=1)	3150W	4200W	4600W	5100W
Max. AC output apparent power	3150VA	4200VA	4600VA	5100VA
Max. AC output current	15A	20A	22A	22A
Nominal AC voltage	230Vac (single phase)			
AC voltage range	180~276Vac (may vary as per corresponding country's grid standard)			
Nominal grid frequency	50Hz/60Hz			
Grid frequency range	45~55Hz/55~65Hz (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. 0.8 overexcited~0.8 underexcited			

Protection

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

System Data

Max. efficiency	97.40%	97.60%	97.60%	97.60%
Max. European efficiency	96.50%	97.00%	97.00%	97.00%
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% no condensing			
Cooling method	Natural cooling			
Max. operating altitude	4000m (>2000m derating)			
Display	Graphic LCD			
Communication	RS485 (RJ45 connector), WiFi (optional)			
DC connection type	SUNCLIX			
AC connection type	Plug and play connector (Wieland RST25I3S)			
Certification	VDE0126-1-1, EN62109-1, EN62109-2, AS/NZS 3100, AS4777.2, AS4777.3, VDE-AR-N-4105, IEC61000-6-2, IEC61000-6-3			

Mechanical Data

Dimensions (W*H*D)	420*555 *179 mm
Mounting method	Wall bracket
Weight	24kg

Circuit Diagram

