

SG40KTL



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Efficient and flexible

- Full 36kW effective power at power factor of 0.9 due to apparent power reserves up to 39.8kVA
- Max. Efficiency at 98.3%
- Dual MPP trackers control



Grid-friendly

- Active power continuously adjustable (0~100%)
- Reactive power control with power factor 0.8 overexcited ~ 0.8 underexcited
- Includes RS-485 interface, compatible with all common monitoring systems



Intelligent design

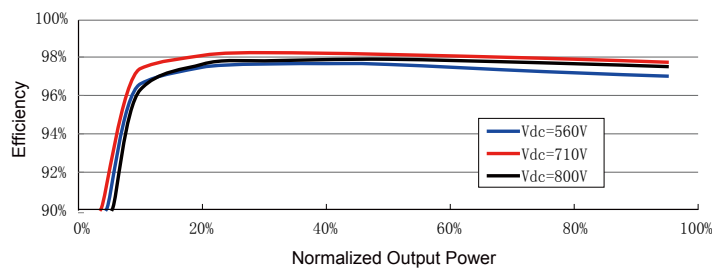
- Reduced cabling on AC side due to higher output voltage of 480Vac
- Integrated combiner box: 8 x MC4 connector pairs with DC string fuses, Type II overvoltage protection and DC switch, more safety and lower the system cost
- Can be wall-mounted without lifting equipment, weight 65 kg



Reliable

- TÜV, BDEW, CGC, SGS, GB/T 19964, France Certification, India Certification

Efficiency Curve



Input Side Data

SG 40KTL

Max. PV input power	40500W
Max. PV input voltage	1000V
Startup voltage	300V
Nominal input voltage	710V
MPP voltage range	280~950V
MPP voltage range for nominal power	560~800V
No. of MPPTs	2
Max. number of PV strings per MPPT	4
Max. PV input current	66A (33A/33A)
Max. current for input connector	12A

Output Side Data

Nominal AC output power	36000W
Max. AC output power (PF=1)	39800W
Max. AC output apparent power	39800VA
Max. AC output current	48A
Nominal AC voltage	3/N/PE, 277/480Vac or 3/PE, 480Vac
AC voltage range	422~528Vac
Nominal grid frequency	50Hz/60Hz
Grid frequency range	45~55Hz/55~65Hz
THD	<3% (Nominal power)
DC current injection	<0.5 %In
Power factor	>0.99@default value at nominal power, (adj. 0.8 leading ~ 0.8 lagging)

Protection

Anti-islanding protection	Yes
LVRT	Yes
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
DC switch	Yes
DC fuse	Yes
Overvoltage protection	DC Type II DIN rail surge arrester (40kA)

System Data

Max. efficiency	98.30%
Max. European efficiency	98.00%
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%
Cooling method	Smart forced air cooling
Max. operating altitude	4000m (>3000m derating)
Display	Graphic LCD
Communication	RS485 (RJ45 connector)
DC connection type	MC4
AC connection type	Screw Clamp terminal
Certification	VDE0126-1-1, EN62109-1, EN62109-2, BDEW, CGC, NRS 097-2-1, GB/T 19964, UTE C15-712-1, IEC 61683, IEC 60068-2, IEC61727, IEC62116, IEC62109-1, IEC62109-2, EN50178, IEC62103, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4

Mechanical Data

Dimensions (W*H*D)	634*820*257mm
Mounting method	Wall bracket
Weight	65kg

Circuit Diagram

