



SG 40KTL

Flexible

- Easy to handle and installation, without lifting machinery assistance.
- Integrated combiner box functionality and type II surge arrester
- IP65 outdoor design, easy to choose installation location.

Efficient

- Max. Efficiency at 98.3%
- Wide MPP voltage range, reduce the influence by varied climate to generation
- 480V AC voltage output, heighten system conversion and transmission efficiency

Grid-friendly

- LVRT function
- Remote active power control (0~100%)
- A variety of reactive power control modes, power factor adjustable between 0.8overexcited ~0.8 underexcited

Qualified

- TÜV, BDEW

Input Side Data

Max. PV input power	40500W (20250W/20250W)
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
Number of MPPTs	2
Max. number of PV strings per MPPT	4
Max. PV input current	66A (33A/33A)
Max. current for input connector	10A
Short-circuit current of PV input	80A (40A/40A)

Output Side Data

Nominal AC output power	36000W
Max. AC output power	39800W
Max. AC output apparent power	39800VA
Max. AC output current	48A
Nominal AC voltage	3/N/PE, 3/PE, 277/480Vac
AC voltage range	422~528Vac
Nominal grid frequency	50/60Hz
Grid frequency range	47~53Hz/57~63Hz
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	Yes
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
DC switch	Integrated
DC fuse	Integrated
Overvoltage protection	Type II DIN rail surge arrester

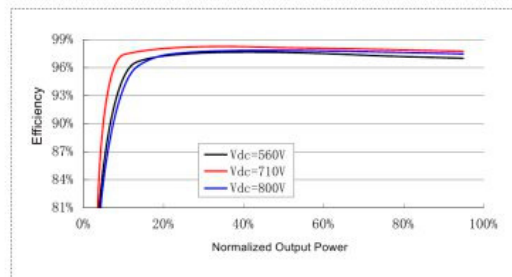
System Data

Max. efficiency	98.3%
Max. European efficiency	98.0%
Isolation method	Transformerless
Ingress protection rating	IP65 (fan IP55)
Night power consumption	<1W
Operating ambient temperature range	-25~60°C (>45°C derating)
Allowable relative humidity range	0~95% non-condensation
Cooling method	Smart forced air cooling
Max. operating altitude	4000m (>2000m derating)
Display	Graphic LCD
Communication interface	RS485 (RJ45 connector)
DC connection type	MC4
AC connection type	Clamping yoke connector
Certification	VDE0126-1-1, EN62109-1, EN62109-2, BDEW

Mechanical Data

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

Efficiency Curve



Circuit Diagram

