



SG 12KTL

Grid-friendly

- LVRT
- Active power continuously adjustable (0~100%)
- Reactive power control with power factor from 0.9 lagging to 0.9 leading

Efficient

- Max. Efficiency at 98%
- Film capacitor, increase system reliability
- Wide DC input voltage range, max. 1000V

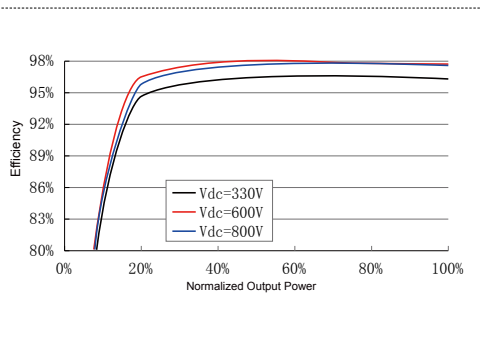
Flexible

- Flexible setting single or twin MPPT
- DC switch, safe and convenient for maintenance

Efficiency Curve

- TÜV, CE, Enel-GUIDA, CGC certification, compliance with BDEW and VDE AR N 4105

Qualified



Input Side Data

Max. PV input power	12800W (6400W/6400W)
Max. PV input voltage	1000V
Startup voltage	270V
Nominal input voltage	650V
MPP voltage range	250~950V
MPP voltage range for nominal power	330~800V
No. of MPPTs	2
Max. number of PV strings per MPPT	3/3
Max. PV input current	40A (20A/20A)
Max. current for input connector	10A
Short-circuit current of PV input	50A (25A/25A)

Output Side Data

Nominal AC output power	12000W
Max. AC output apparent power	13300VA
Max. AC output current	21A
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. 0.9 overexcited ~0.9 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	No
Overvoltage protection	Varistors

System Data

Max. efficiency	98.0%
Max. European efficiency	97.2%
Isolation method	Transformerless
Ingress protection rating	IP65 (Fan IP54)
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	RS485 (RJ45 connector)
DC connection type	MC4
AC connection type	Plug and play connector (Amphenol C16_L)
Certification	EN62109-1, EN62109-2, EN61000-6-2, EN61000-6-3, VDE0126-1-1, CEI-021, C10/C11, EN50160, RD1669, IEC61727, UTE C 15-712-1, EN50438, AS/NZS3100, AS4777.2, AS4777.3, G59/2, VDE-AR-N-4105, BDEW, CGC compliance

Mechanical Data

Dimensions (W x H x D)	648 x 686 x 246mm
Mounting method	Wall bracket
Weight	50kg

Circuit Diagram:

