

SG 20KTL



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Efficient and flexible

- Full 20 kW effective power at power factor of 0.9 due to apparent power reserves up to 22.2 kVA
- Photon test results "very good", with a maximum efficiency of 98% (Photon Profi 2-2012)
- Dual MPP trackers control



Grid-friendly

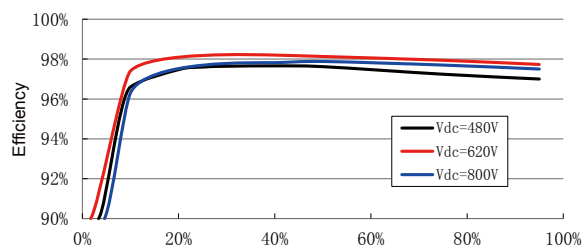
- Active power continuously adjustable (0~100%)
- Reactive power control with power factor 0.8 overexcited ~ 0.8 underexcited
- Includes RS-485 interface, compatible with all common monitoring systems



Reliable

- TÜV, CE, G59/3, AS4777, BDEW, VDE AR N 4105, CGC certification, CEI 0-21, compliance with Italian medium voltage grid requirement

Efficiency Curve



Input Data

Max. PV input voltage	1000V
Startup voltage	300V
Nominal input voltage	620V
MPP voltage range	280~950V
MPP voltage range for nominal power	480~800V
No. of MPPTs	2
Max. number of PV strings per MPPT	3
Max. PV input current	42A(21A/21A)
Max. current for input connector	12A

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Output Data

Nominal AC output power	20000W
Max. AC output power (PF=1)	22200W
Max. AC output apparent power	22200VA
Max. AC output current	33A
Nominal AC voltage	3/N/PE, 230/400Vac
AC voltage range	310~480Vac
Nominal grid frequency	50Hz/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 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	No
Oversvoltage protection	Varistors

System Data

Max. efficiency	98.00%
Max. European efficiency	97.30%
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	Plug and play connector
Certification	EN62109-1, EN62109-2, EN61000-6-2, EN61000-6-3, VDE0126-1-1, CEI 0-21, AS/NZS3100, AS4777.2, AS4777.3, VDE-AR-N-4105, BDEW, CGC

Mechanical Data

Dimensions (W*H*D)	648*686*246mm
Mounting method	Wall bracket
Weight	55kg

Circuit Diagram

