

SG30KTL-M

String Inverter



High Yield

- Max. efficiency 98.5 %, European efficiency 98.3 %
- Full power operation without derating at 50 °C
- Up to 3 MPP trackers



Easy O&M

- Integrated string current monitoring function for fast trouble shooting
- Compact design and light weight for easy installation
- Plug-in design of fan and SPD, easy for on-site maintenance.



Saved Investment

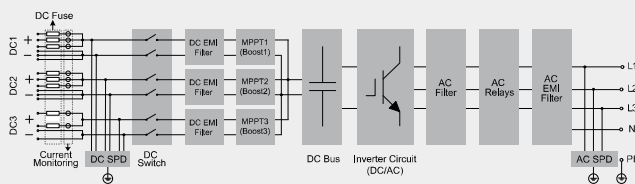
- Max. DC/AC ratio up to 1.4
- Can be installed horizontally, saving installation cost
- Integrated DC combiner box and DC/AC overvoltage protection



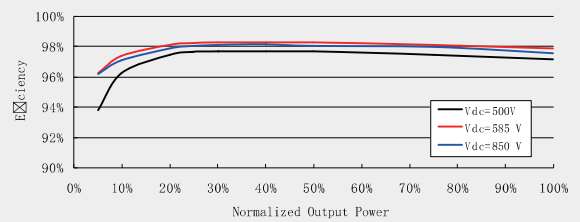
Grid Support

- Compliance with standards: CE, IEC 62109, VDE 0126-1-1, VDE-AR-N-4105
- Active & reactive power control and power ramp rate control

Circuit Diagram



Efficiency Curve



Input (DC)

SG30KTL-M

Max. PV input voltage	1100 V
Min. PV input voltage / Startup input voltage	200 V / 250 V
Nominal input voltage	585 V
MPP voltage range	200 - 1000 V
MPP voltage range for nominal power	500 - 850 V
No. of independent MPP inputs	3
Max. number of PV strings per MPPT	3 / 3 / 2
Max. PV input current	88 A (33 A / 33 A / 22 A)
Max. current for input connector	12 A
Max. DC short-circuit current	96 A (36 A / 36 A / 24 A)

Output (AC)

Nominal AC power (at 50 °C)	30000 W
Max. AC output at PF=1 (at 50°C)	30000 W
Max. AC apparent power (at 50 °C)	30000 VA
Max. AC output current	53.5 A
Nominal AC voltage	3 / PE or 3 / N / PE, 230 / 400 V
AC voltage range	310 - 480 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 - 55 Hz, 60 Hz / 55 - 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading - 0.8 lagging
Feed-in phases / Connection phases	3 / 3

Efficiency

Max. efficiency / Euro. efficiency	98.5 % / 98.3 %
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Protection

DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch / AC switch	Yes / No
DC fuse	Yes (positive, 15A)
PV string current monitoring	Yes
Overvoltage protection	DC Type II / AC Type II

General Data

Dimensions (W*H*D)	525*740*240 mm 20.7***29.1***9.4"
Weight	48 kg 105.8 lb
Isolation method	Transformerless
Degree of protection	IP65
Night power consumption	< 2 W
Operating ambient temperature range	-25 to 60 °C (> 50 °C derating) -13 to 140 °F (> 122 °F derating)
Allowable relative humidity range (non-condensing)	0 - 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating) 13123 ft (> 9843 ft derating)
Display / Communication	Graphic LCD / RS485
DC connection type	MC4 (Max. 6 mm ²)
AC connection type	Screw clamp terminal (Max. 50 mm ²)
Compliance	CE, IEC 62109, VDE 0126-1-1, VDE-AR-N-4105
Grid support	Active & reactive power control and power ramp rate control
Type designation	SG30KTL-M-10

