

# SG10KTL-M/SG12KTL-M

Multi-MPPT String Inverter for 1000 Vdc System



## HIGH YIELD

- Industry leading efficiency of 98.6%
- Flexible PV string configurations with DC/AC ratio up to 1.3

## SMART MANAGEMENT

- Feature-rich online monitoring via App or Web
- Over-the-air firmware updates
- Gain energy flow transparency with Sungrow smart meter
- Accurate dynamic feed-in control

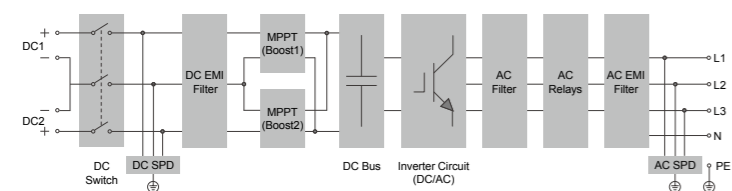
## SAFE AND DURABLE

- Built-in surge arresters and residual current protection
- High anti-corrosion rating at C5

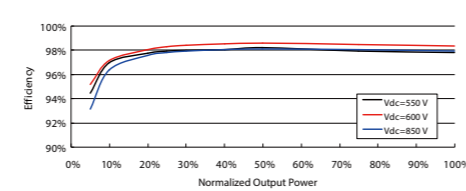
## EASY AND USER FRIENDLY

- 20kg compact design
- Unique push-in connectors for time-saving installation
- Mounting plate with built-in level
- Fast and easy commissioning via App

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG10KTL-M	SG12KTL-M
<b>Input (DC)</b>		
Max. PV input voltage		1100 V
Min. PV input voltage / Start-up input voltage		200 V / 250 V
Nominal PV input voltage		600 V
MPP voltage range		200 V – 1000 V
MPP voltage range for nominal power	470 V – 850 V	550 V – 850 V
No. of independent MPP inputs		2
Max. number of PV strings per MPPT		1
Max. PV input current		22A (11 A / 11 A)
Max. current for input connector		15 A
Max. DC short-circuit current		30 A (15 A / 15 A)
<b>Output (AC)</b>		
AC output power	11 kVA * @ 35 °C / 10 kVA @ 45 °C	13.2 kVA @ 35 °C / 12 kVA @ 45 °C
Max. AC output current	16.5 A	20 A
Nominal AC voltage		3 / N / PE, 230 / 400 V
AC voltage range		270 V – 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		> 0.99
Adjustable power factor		0.8 leading – 0.8 lagging
Feed-in phases / connection phases		3 / 3
<b>Efficiency</b>		
Max. efficiency / Euro. efficiency		98.6 % / 98.1 %
<b>Protection</b>		
LVRT		Yes
DC reverse connection protection		Yes
AC short-circuit protection		Yes
Leakage current protection		Yes
Grid monitoring		Yes
DC switch		Yes**
AC switch		No
PV string current monitoring		Yes
PID recovery function		Optional
Overvoltage protection		DC Type II / AC Type II
<b>General Data</b>		
Dimensions (W*H*D)		370*485*160 mm
Weight		20 kg
Isolation method		Transformerless
Degree of protection		IP65
Night power consumption		< 1 W***
Operating ambient temperature range		-25 to 60 °C (> 45 °C derating)
Allowable relative humidity range		0 – 100 % (non-condensing)
Cooling method		Natural cooling
Max. operating altitude		4000 m (> 3000 m derating)
Display / Communication		LED, Bluetooth + APP / RS485 (optional: WiFi, Ethernet)
DC connection type		MC4 (Max. 6 mm <sup>2</sup> )
AC connection type		Plug and play connector (Max. 6 mm <sup>2</sup> )***
Compliance		IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-3-11, IEC/EN 61000-3-12, UTE C15-712-1, IEC 61727, IEC 62116, VDE0126-1-1/4105, G59/3, CEI 0-21, UNE 206007-1, EN50438:2013
Grid support		Active & reactive power control and power ramp rate control
Type designation	SG10KTL-M	SG12KTL-M

\* :VDE4105 :10000VA

\*\* : Devices for Australia are not equipped with DC switches

\*\*\*:Deluxe Version: < 3W (DC & AC power supply); Max.10mm<sup>2</sup> (Unique push-in connector)

