SG15KTL-M/SG20KTL-M

Multi-MPPT String Inverter for 1000 Vdc System

SUNGROW
Clean power for all



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

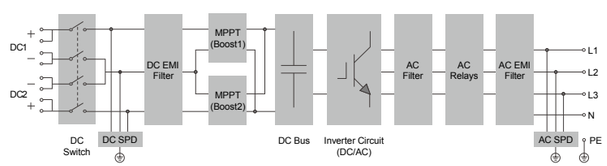
SAFE AND DURABLE

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

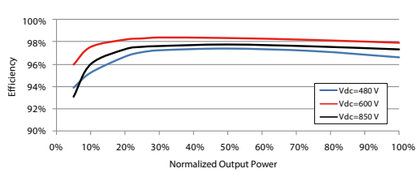
EASY AND USER FRIENDLY

- 24kg 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	SG15KTL-M	SG20KTL-M
Input (DC)		
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	380 V – 850 V	480 V – 850 V
No. of independent MPP inputs	2	
Max. number of PV strings per MPPT	2	
Max. PV input current	44 A (22 A / 22 A)	
Max. current for input connector	15 A	
Max. DC short-circuit current	60 A (30 A / 30 A)	
Output (AC)		
AC output power	16.5 kVA @ 35 ℃ / 15 kVA @ 45 ℃	22 kVA @ 35 ℃ / 20 kVA @ 45 ℃
Max. AC output current	24.0 A	31.9 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	
Efficiency		
Max. efficiency / Euro. efficiency	98.6 % / 98.3 %	
Protection		
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	
General Data		
Dimensions (W*H*D)	370*485*210 mm	
Weight	24 kg	
Isolation method	Transformerless	
Degree of protection	IP65	
Night power consumption	< 1 W**	
Operating ambient temperature range	-25 to 60 ℃ (> 45 ℃ derating)	
Allowable relative humidity range	0 – 100 % (non-condensing)	
Cooling method	Smart forced air cooling	
Max. operating altitude	4000 m (> 3000 m derating)	
Display / Communication	LED, Bluetooth + APP / RS485 (Optional: WiFi / Ethernet)	
DC connection type	MC4 (Max. 6 mm²)	
AC connection type	Plug and play connector (Max. 16 mm²)	
Compliance	EN 62109-1, EN 62109-2, EN 61000-3-11, EN 61000-3-12, IEC 61727, IEC 62116, VDE0126-1-1/4105, AS 4777.2, IEC 60068, IEC 61683, EN 50530, CEI 0-21,NB/ T32004-2013, UNE 206007-1, G59/3, UTE C15-712-1	
Grid support	Active & reactive power control and power ramp rate control	
Type designation	SG15KTL-M	SG20KTL-M

*:Devices for Australia are not equipped with DC switches

**:Deluxe Version: < 3W (DC & AC power supply)

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