

SG5KTL-MT/SG6KTL-MT/ SG8KTL-M

SUNGROW
Clean power for all

SG5KTL- MT/SG6KTL-MT/SG8KTL-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

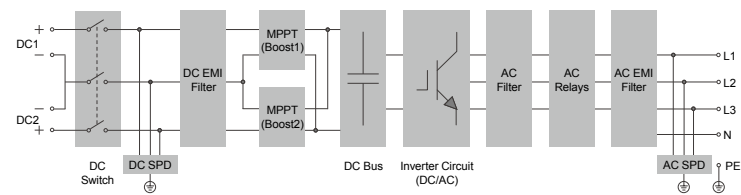
- Built-in surge arresters and residual current protection
- High anti-corrosion rating at C5



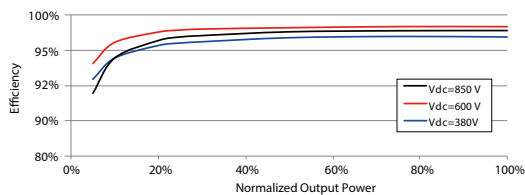
EASY AND USER FRIENDLY

- 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	SG5KTL-MT	SG6KTL-MT	SG8KTL-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 – 1000 V		
MPP voltage range for nominal power	240 – 850 V	290 – 850 V	380 – 850 V
No. of independent MPP inputs	2		
Max. number of PV strings per MPPT	1		
Max. PV input current	22A (11A / 11A)		
Max. current for input connector	15 A		
Max. DC short-circuit current	30 A (15A / 15A)		
Output (AC)			
Nominal AC power	5500 VA@ 35 °C / 5000 VA @ 45 °C	6600 VA@ 35 °C / 6000 VA @ 45 °C	8800 VA@ 35 °C / 8000 VA @ 45 °C
Max. AC output current (at 35 °C)	8.5A	10.0 A	13.3 A
Nominal AC voltage	3 / N / PE, 230 / 400 V		
AC voltage range	270 - 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 / European efficiency	98.4% / 97.6%	98.4% / 97.7%	98.6% / 98.0%
Protection			
LVRT	Yes		
Islanding Protection	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		
Overvoltage protection	DC Type II / AC Type II		
General Data			
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 ²)		
AC connection type	Plug and play connector (Max. 6 mm ²)***		
Compliance	EN62109-1, EN62109-2, IEC 61727, IEC 62116, VDE 0126-1-1/4105, AS 4777.2, EN 50438:2013, C10/11, G59/3	EN62109-1, EN62109-2, IEC 61727, IEC 62116,VDE 0126-1-1/4105,EN 50438:2013, C10/11, G59/3	EN62109-1, EN62109-2, IEC 61727, IEC 62116,VDE 0126-1-1/4105,UTE C15-712-1,VFR-2014, CEI 0-21, EN 50438:2013, C10/11, G59/3, UNE 206007-1
Grid Support	Active & reactive power control and power ramp rate control		
Type designation	SG5KTL-MT	SG6KTL-MT	SG8KTL-M

*: Devices for Australia are not equipped with DC switches

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

***:Deluxe Version: Max.10mm² (Unique push-in connector)



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