

## SG15KTL-M/SG20KTL-M

String Inverter



### High Yield

- Max. efficiency 98.6 %, European efficiency 98.3 %
- 1.1 overload capacity, 10% more yield under high irradiance
- Adapt to complex power grid, extend the grid - connected generation time
- Patented PID recovery function



### Easy O&M

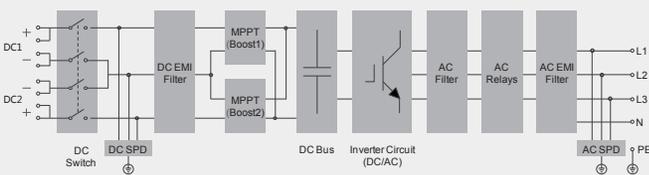
- 26kg, easy O&M
- Plug and play design, easy installation
- String current monitoring function for fast trouble shooting
- Fast commissioning, easy local and on-line monitoring



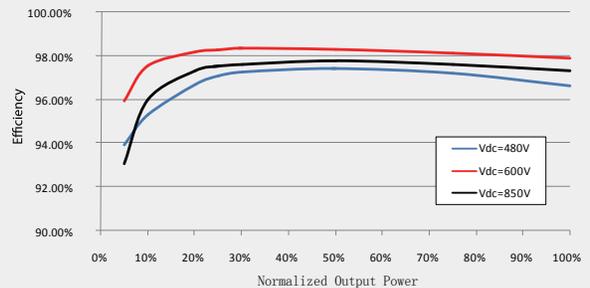
### Safe and Reliable

- High power quality, no interference for electrical equipment
- Low radiation, compliance with household equipment standards
- High anti-corrosion with aluminum alloy die casting
- Build-in surge arresters and residual current protection

### Circuit Diagram



### Efficiency Curve



## Input (DC)

	SG15KTL-M	SG20KTL-M
Max. PV input voltage	1000 V	
Min. PV input voltage / Startup voltage	200 V / 250 V	
Nominal 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 (at 35 °C)	44A (22A / 22A)	
Max. current for input connector	15 A	
Max. PV short-circuit current	60 A (30A / 30A )	

## Output (AC)

	SG15KTL-M	SG20KTL-M
Nominal AC power (at 45 °C)	15000 W	20000 W
Max. AC output at PF=1 (at 35 °C)	16500 W	22000 W
Max. AC apparent power (at 35 °C)	16500 VA	22000 VA
Max. AC output current (at 35 °C)	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	50 Hz, 60 Hz,	
Grid frequency range	45 Hz–55 Hz, 55 Hz–65 Hz	
Total Harmonic Distortion (THD)	< 3 % (of nominal power)	
DC current injection	< 0.5 % I <sub>n</sub>	
Power factor	>0.99 / 0.8 leading - 0.8 lagging	
Feed-in phases / Connection phases	3 / 3	

## Efficiency

	SG15KTL-M	SG20KTL-M
Max. efficiency / Euro. efficiency	98.6 % / 98.3 %	

## Protection

	SG15KTL-M	SG20KTL-M
Islanding Protection	Yes	
LVRT	No	
DC reverse connection protection	Yes	
AC short-circuit protection	Yes	
Leakage current protection	Yes	
Grid monitoring	Yes	
DC switch / AC switch	Yes / No	
PV string current monitoring	Yes	
PID recovery function	Optional	
Overvoltage protection	DC Type II / AC Type II	

## General Data

	SG15KTL-M	SG20KTL-M
Dimensions (W*H*D)	370 * 485 * 210 mm	
Weight	26 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 (non-condensing)	0 – 100 %	
Cooling method	Smart forced air cooling	
Max. operating altitude	4000 m (> 2000 m derating)	
Display / Communication	LED, Bluetooth + APP / RS485, (WiFi, E-Net optional)	
DC connection type	MC4 (Max. 6 mm <sup>2</sup> )	
AC connection type	Plug and play connector (Max. 16 mm <sup>2</sup> )	
Compliance	EN62109-1, EN62109-2, IEC 61727, IEC 62116	
Grid support	Active & reactive power control and power ramp rate control	
Type designation	SG15KTL-M-10	SG20KTL-M-10

