

Residential Three Phase Inverter



HIGH YIELD

- Max. efficiency 98.6%, European efficiency 98.1%
- 4 string inputs, flexible PV configuration



SMART MANAGEMENT

- Touch free commissioning and monitoring with smartphone
- One-click local and remote firmware update
- Export power control with smart energy meter



SAFE AND DURABLE

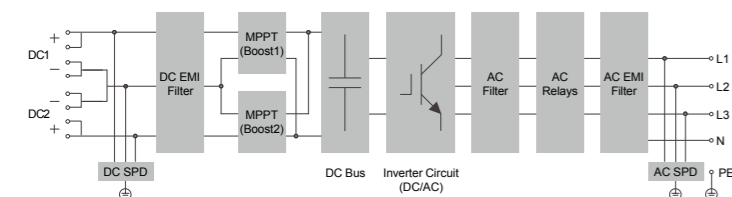
- High anti-corrosion with aluminum alloy die casting
- Built-in SPD and residual current protection



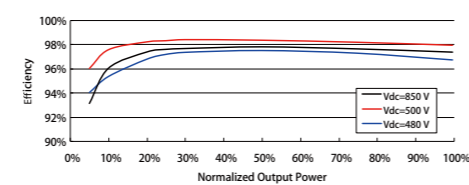
EASY INSTALLATION

- Plug and play connectors
- 24kg compact design

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG10KTL-MT
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	320 – 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	10000 VA @ 45 °C
Max. AC output current	16.5 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 % I _n
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	98.6 % / 98.1 %
Protection	
DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch	No
AC switch	No
PV string current monitoring	Yes
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 °C (> 45 °C derating)
Allowable relative humidity range (non-condensing)	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	LED, Bluetooth + APP
Communication	RS485 / Optional: WiFi, Ethernet
DC connection type	MC4 (Max. 6 mm ²)
AC connection type	Plug and play connector (Max. 16 mm ²)
Compliance	EN 62109-1, EN 62109-2, IEC61000-6-2, IEC 61000-6-3, IEC 62116, AS 4777.2
Grid Support	Active & reactive power control and power ramp rate control