

# SG132KTL-M/SG150KTL-M Preliminary

Multi-MPPT String Inverter for 1000 Vdc System



### High Yield

- Max. efficiency 99%, European efficiency 98.7 %
- 12 MPPT, adaptable to complex installation applications
- Supports bifacial PV modules with maximum DC operating current up to 13 A
- Patented anti-PID function optional



### Easy O&M

- Integrated string current monitoring function and IV curve scan for fast trouble shooting
- IP68 smart fan cooling, long lifetime due to low temperature rise
- AC and DC power redundancy design, 24-hour status monitoring



### Saved Investment

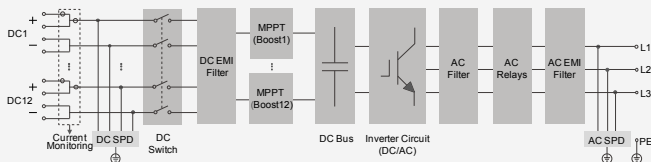
- Integrated tracking system power supply and communication interface
- Night Static Var Generator (SVG) function optional
- The max. current of the input connector is 30A, supports two strings combined as one connection, saving the DC cable cost



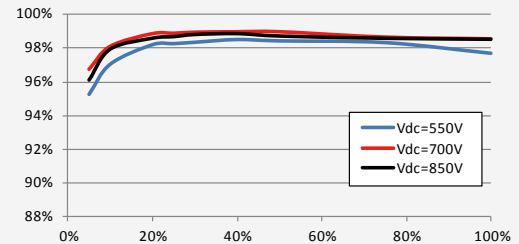
### Grid Support

- Compliance with standards: CEA, IEC 62109, IEC 61727, IEC 62116, G59/3, VDE-AR-N-4120, BDEW, EN 50438
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

### Circuit Diagram



### Efficiency Curve



Input (DC)	SG132KTL-M	SG150KTL-M
Max. PV input voltage	1100 V	
Min. PV input voltage / Startup input voltage	200 V / 250 V	
Nominal input voltage	700 V	780 V
MPP voltage range	200 – 1000 V	
MPP voltage range for nominal power	550 – 850 V	
No. of independent MPP inputs	12	
Max. number of PV strings per MPPT	2	
Max. PV input current	26 A * 12	
Max. current for input connector	30 A	
Max. DC short-circuit current	40 A * 12	
<b>Output (AC)</b>		
AC output power	132 kVA @ 45 °C / 120 kVA @ 50 °C	150 kVA @ 45 °C / 136 kVA @ 50 °C
Max. AC output current	158.8 A	160.4 A
Nominal AC voltage	3 / PE, 480 V	3 / PE, 540 V
AC voltage range	384 – 552 V	432 – 621 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 / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases	3 / 3	
<b>Efficiency</b>		
Max. efficiency / Euro. efficiency	99 % / 98.7 %	
<b>Protection</b>		
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	
Anti-PID function	Optional	
NightSVG function	Yes	
Overvoltage protection	DC Type II / AC Type II	
<b>General Data</b>		
Dimensions (W*H*D)	999*658*357 mm	
Weight	85 kg	
Isolation method	Transformerless	
Degree of protection	IP65	
Night power consumption	< 3.5 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 / Communication	LED, Bluetooth+APP / RS485, PLC (optional)	
DC connection type	MC4 (Max. 6 mm <sup>2</sup> )	
AC connection type	OT terminal (Max. 240 mm <sup>2</sup> )	
Compliance	CEA, IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, G59/3, VDE-AR-N-4120, BDEW, IEC 61000-6-4, EN 50438	
Grid support	SVG, LVRT, HVRT, ZVRT, active & reactive power control and power ramp rate control	
Type designation	SG132KTL-M-10	SG150KTL-M-10

