

SG1250UD/SG1500UD



High Yield

- Efficient three-level topology, max. efficiency up to 99 %, European efficiency 98.7 %
- Full power operation without derating at 50 °C
- Long-term overload at 1.1 Pn
- DC/AC ratio up to 1.5



Easy O&M

- Integrated zone current monitoring function for fast trouble shooting
- Modular design easy for maintenance
- IP65 protection



Saved Investment

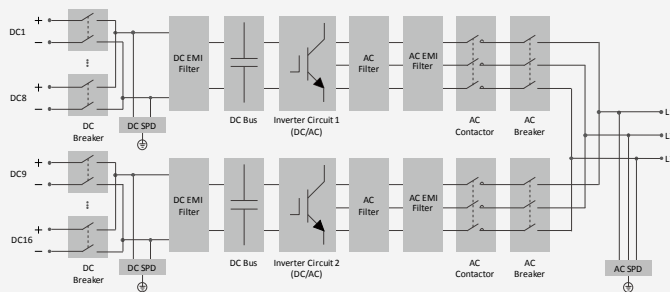
- Can be connected to double-winding transformer, saving transformer costs
- Integrated SVG function



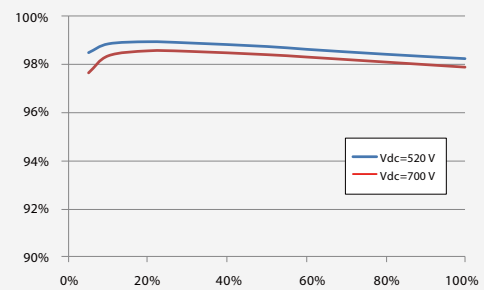
Grid Support

- Compliance with standards: CE, IEC 62109, IEC 61727, IEC 62116
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

Circuit Diagram



Efficiency Curve



Input (DC)

	SG1250UD	SG1500UD
Max. PV input voltage	1100 V	1100 V
Min. PV input voltage / Startup input voltage	520 V / 540 V	580 V / 600 V
MPP voltage range for nominal power	520 – 850 V	580 – 850 V
No. of independent MPP inputs	2	
No. of DC inputs	16	
Max. PV input current	2712 A	2896 A
Max. DC short-circuit current	3200 A	

Output (AC)

Nominal AC power	1386 kVA @ 45 °C / 1260 kVA @ 50 °C	1650 kVA @ 45 °C / 1500 kVA @ 50 °C
Max. AC output current	2222 A	2381 A
Nominal AC voltage	360 V	400 V
AC voltage range	288 – 414 V	320 – 460 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 % of nominal output current	
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	99.0 % / 98.7 %
------------------------------------	-----------------

Protection

DC reverse connection protection	Yes
DC input protection	Circuit breaker
AC output protection	Circuit breaker
Overvoltage protection	DC Type II / AC Type II
Grid monitoring / Ground fault monitoring	Yes / Yes
Insulation monitoring	Yes
Overheat protection	Yes
Night SVG function	Yes
Anti-PID function	Optional

General Data

Dimensions (W*H*D)	2150*2120*850 mm
Weight	1900 kg
Isolation method	Transformerless
Degree of protection	IP65
Auxiliary power supply	220 Vac, 2 kVA
Night power consumption	< 40 W
Operating ambient temperature range	-35 to 60 °C (> 50 °C derating)
Allowable relative humidity range (non-condensing)	0 – 95 %
Cooling method	Temperature controlled forced air cooling
Max. operating altitude	4500 m (> 3000 m derating)
Display	Touch screen
Communication	RS485, Ethernet
Compliance	IEC62109-1, IEC62109-2, IEC61727, IEC62116
Grid support	SVG, LVRT, HVRT, active & reactive power control and power ramp rate control
Type designation	SG1250UD-10 SG1500UD-10

