

# SG125HV



SUNGROW Inverter, Designed For TrinaPro



## High Yield

- Patent five-level topology,max.efficiency 98.9%,European efficiency 98.7%,CEC efficiency 98.5%
- Full power operation without derating at 50°C



## Easy O&M

- Virtual central solution,easy for O&M
- Compact design and light weight for easy installation



## Saved Investment

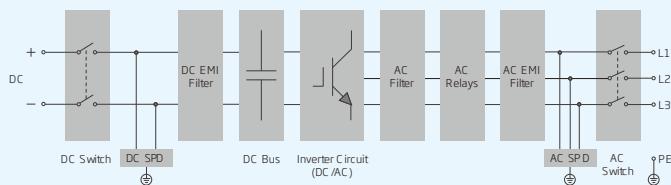
- DC 1500V , AC 600V,low system initial investment
- 1to5MV power block design for lower AC transformer and labor cost
- Max,DC/AC ratio up to 1.5



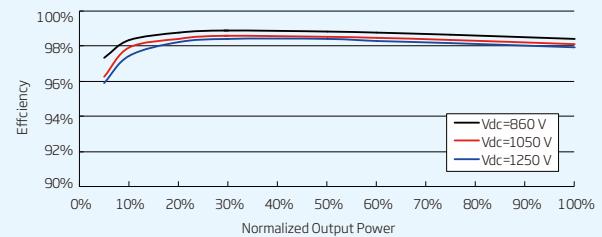
## Grid Support

- Compliance with standards:CE,UL 1741,UL1741SA,IEEE 1547,IEEE1547.1and California Rule 21
- Low/High voltage ride through(L/HVRT)
- Active&reactive power control and power ramp rate control

## Circuit Diagram



## Efficiency Curve



# SG125HV

## Input(DC)

	SG125HV
Max.PV input voltage	1500V
Min.PV input voltage/Startup input voltage	860V/920V
Nominal input voltage	1050V
MPP voltage range	860-1450V
MPP voltage range for nominal power	860-1450V
No.of independent MPP inputs	1
No.of DC inputs	1
Max.PV input current	148A
Max.DC short-circuit current	240A

## Output(AC)

Nominal AC power(at 50°C)	125000W
Max.AC output power at PF=1(at 50°C)	125000W
Max.AC apparent power(at 50°C)	125000KVA
Max.AC output current	120A
Nominal AC voltage	3/PE,600V
AC voltage range	480-690V
Nominal grid frequency/Grid frequency range	50Hz/45-55Hz,60Hz/55-65Hz
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

## Efficiency

Max.AC efficiency/Euro.efficiency/CEC effciency	99.0%/98.7%/98.5%
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## Protection

DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch/AC switch	Yes/Yes
Overheat protection	DC Type II/AC Type II

## General Data

Dimensions(W*H*D)	670*890*296mm26.4"**35.0"**11.7"
Weight	72kg 158.7 lb
Isolation method	Transformerless
Degree of protection	IP65
Night power consumption	<4W
Operating ambient temoerature range	-25 to 60°C (>50°C derating)-13 to 140°F (>122°F derating)
Allowable relative humidity range(non-condensing)	0-100%
Cooling method	Smart forced air cooling
Max.operating altiude	4500m(>3000m derating)13123ft(>9843 ft derating)
Display/Communication	LED,Bluetooth+APP/RS485
DC connection type	OT or DT terminal(Max.185 mm <sup>2</sup> )
AC connection type	OT or DT terminal(Max.185 mm <sup>2</sup> )
Compliance	CE,UL1741,UL1741SA,IEEE1547,CSAC22.2107,1-01-2001 and California Rule 21
Grid Support	LVRT,HVRT,active & reactive power control and power ramp rate control
Type designation	SG125HV-10