

# SG33K3J

## Multi-MPPT String Inverter for Japan 1000 Vdc System



### HIGH YIELD

- Max. efficiency 98.5 %, European efficiency 98.3 %
- Full power operation without derating at 50 °C
- Up to 3 MPP trackers



### EASY O&M

- Integrated IV curve scan function for fast trouble shooting\*
- Compact design and light weight for easy installation
- Plug-in design of fan and SPD, easy for on-site maintenance



### SAVED INVESTMENT

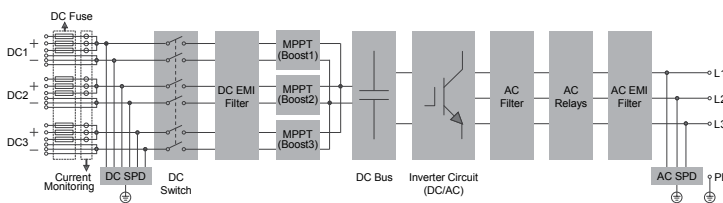
- Max. DC/AC ratio up to 1.8
- Can be installed horizontally, saving installation cost



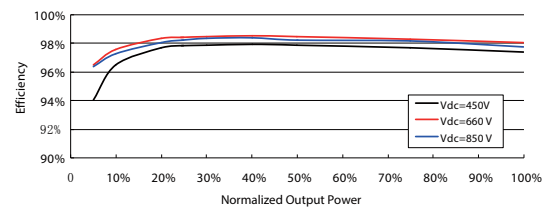
### GRID SUPPORT

- Compliance with Japan utility grid standards
- Fault ride through (FRT) 2017
- Remote active power control

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



Type designation	SG33K3J
<b>Input (DC)</b>	
Max. PV input voltage	1100 V
Min. PV input voltage / Startup input voltage	200 V / 250 V
Nominal input voltage	660 V
MPP voltage range	200 – 1000 V
MPP voltage range for nominal power	450 – 850 V
No. of independent MPP inputs	3
Max. number of PV strings per MPPT	3
Max. PV input current	99 A (33 A / 33 A / 33 A)
Max. current for input connector	12 A
Max. DC short-circuit current	108 A (36 A / 36 A / 36 A)
<b>Output (AC)</b>	
AC output power	33.3 kVA @ 50 °C / 38.9 kVA @ 50 °C (settable)
Max. AC output current	53.5 A
Nominal AC voltage	3 / PE, 420 V / 440 V
AC voltage range	365 – 528 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 <sub>n</sub>
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	98.5 %
Euro. efficiency	98.3 %
<b>Protection</b>	
DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch	Yes
AC switch	No
DC fuse	Yes (positive, 15A)
PV string current monitoring	Yes
Overvoltage protection	DC Type II / AC Type II
<b>General Data</b>	
Dimensions (W*H*D)	525*740*240 mm
Weight	48 kg
Isolation method	Transformerless
Degree of protection	IP65
Night power consumption	< 2 W
Operating ambient temperature range	-25 to 60 °C (> 50 °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	Graphic LCD / RS485
DC connection type	MC4 (Max. 6 mm <sup>2</sup> )
AC connection type	OT terminal (Max. 50 mm <sup>2</sup> )
Grid support	FRT 2017, active & reactive power control and power ramp rate control
Type designation	SG33K3J

\*: Only compatible with Sungrow logger and iSolarCloud

