SG33CX-US/SG55CX-US New

String Inverter For North America

- Up to 6 MPPTs with max. efficiency 98.9%
- Compatible with bifacial modules
- Built-in PID recovery function

- Touch free commissioning and remote firmware upgrade
- Online IV curve scan and diagnosis*
- Fuse free design with smart string current monitoring

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SG33CX-US/SG55CX-US

New

SUNGROW Clean power for all

CIRCUIT DIAGRAM

EFFICIENCY CURVE

Type designation

<table>
<thead>
<tr>
<th>Input (DC)</th>
<th>SG33CX-US</th>
<th>SG55CX-US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. PV input voltage</td>
<td>1000 V</td>
<td></td>
</tr>
<tr>
<td>Min. PV input voltage / Start-up input voltage</td>
<td>200 V / 200 V</td>
<td></td>
</tr>
<tr>
<td>Nominal PV input voltage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPPT voltage range</td>
<td>200 – 1000 V</td>
<td></td>
</tr>
<tr>
<td>MPPT voltage range for nominal power</td>
<td>500 – 850 V</td>
<td></td>
</tr>
<tr>
<td>No. of independent MPPT inputs</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Max. number of PV strings per MPPT</td>
<td>2 / 2 / 2 / 2 / 2 / 2</td>
<td>2 / 2 / 2 / 2 / 2 / 2</td>
</tr>
<tr>
<td>Max. PV input current</td>
<td>26 A * 4</td>
<td>26 A * 6</td>
</tr>
<tr>
<td>Max. current for input connector</td>
<td>15 A</td>
<td>15 A</td>
</tr>
<tr>
<td>Max. DC short-circuit current</td>
<td>40 A * 4</td>
<td>40 A * 6</td>
</tr>
</tbody>
</table>

Output (AC)

| AC output power            | 33 kVA @ 45 °C (113 °F) / 30 kVA @ 50 °C (122 °F) | 55 kVA @ 45 °C (113 °F) / 50 kVA @ 50 °C (122 °F) |
| Nominal AC voltage         | 39.7A      | 66.2 A    |
| AC voltage range           | 422 – 528 V |           |
| Nominal grid frequency / Grid frequency range | 60 Hz / 55 – 65 Hz |    |
| THD                        | 3 % (at nominal power) |    |
| DC current injection       | <= 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. efficiency / CEC efficiency | 98.7% / 98.5% | 98.9% / 98.5%

Protection

- DC reverse connection protection
- AC short-circuit protection
- Leakage current protection
- Grid monitoring
- DC switch
- AC switch
- PV string current monitoring
- Anti-PID function
- Arc fault circuit interrupter (AFCI)
- Overvoltage protection

General Data

- DC Type II / AC Type II

Dimensions (W*H*D)

| Weight | 62 kg (136.7 lbs) | 68 kg (149.9 lbs) |

Isolation method

- Transformerless

Degree of protection

- NEMA 4x

Night power consumption

- + 2 W

Operating ambient temperature range

- -30 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

- LED, Bluetooth + APP

Communication

- RS485 / optional: WiFi, Ethernet

Third-Party communication protocol

- Sunspec Modbus

DC connection type

- Screw clamp terminal (SGAW, Cu or Al)

AC connection type

- DT (max. 2 / DAWG, Cu or Al)

Compliance

- UL1741, UL 7104A, CA Rule 21, IEEE 1547, IEEE 1547.1, CSA C22.2; No.1071-05, UL 508B and FCC Part 15

Grid support

- LVRT, HVRT, active & reactive power control and power ramp rate control

*: Only compatible with Sungrow logger and iSolarCloud

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