Smart Energy Center

Higher Revenue
- High efficiency inverter topology
- Max. efficiency 98.6%
- European weighted efficiency 98.0%

Simple & Easy
- 10.6kg, allows one person simple installation
- Optimized AC connector for quick wiring
- Supports one-click inverter configuration

Battery Ready
- Integrated Plug & Play energy storage interface

Safe & Reliable
- IP65, natural convection
- Integrated lightening protection for both DC and AC
- Zero export function with smart power sensor
# SUN2000L-2/3/3.68/4/4.6/5KTL

## Technical Specification

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<tbody>
<tr>
<td>Efficiency</td>
<td></td>
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<tr>
<td>Max. efficiency</td>
<td>98.4%</td>
<td>98.5%</td>
<td>98.5%</td>
<td>98.6%</td>
<td>98.6%</td>
<td>98.6%</td>
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<tr>
<td>European weighted efficiency</td>
<td>97.0%</td>
<td>97.6%</td>
<td>97.9%</td>
<td>98.0%</td>
<td>98.0%</td>
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<tr>
<td>Input</td>
<td></td>
<td></td>
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<tr>
<td>Recommended max. PV power</td>
<td>3,000 Wp</td>
<td>4,500 Wp</td>
<td>5,520 Wp</td>
<td>6,000 Wp</td>
<td>6,800 Wp</td>
<td>7,500 Wp</td>
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<tr>
<td>Max. input voltage</td>
<td>600 V / 495 V</td>
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<tr>
<td>Operating voltage range</td>
<td>90 V - 600 V / 30 V - 495 V</td>
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<td>Start-up voltage</td>
<td>120 V</td>
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<tr>
<td>Full power MPPT voltage range</td>
<td>120 V - 480 V</td>
<td>160 V - 480 V</td>
<td>190 V - 480 V</td>
<td>210 V - 480 V</td>
<td>260 V - 480 V</td>
<td>260 V - 480 V</td>
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<td>Rated input voltage</td>
<td>380 V</td>
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<td>Max. input current per MPPT</td>
<td>11 A</td>
<td></td>
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<td>Max. short-circuit current</td>
<td>15 A</td>
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<td>Number of MPPT trackers</td>
<td>2</td>
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<td>Max. number of inputs per MPPT</td>
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<td>Output</td>
<td></td>
<td></td>
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<tr>
<td>Grid connection</td>
<td>Single phase</td>
<td></td>
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<tr>
<td>Rated output power</td>
<td>2,000 W</td>
<td>3,000 W</td>
<td>3,680 W</td>
<td>4,000 W</td>
<td>4,600 W</td>
<td>5,000 W</td>
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<tr>
<td>Max. apparent power</td>
<td>2,200 VA</td>
<td>3,300 VA</td>
<td>3,680 VA</td>
<td>4,400 VA</td>
<td>5,000 VA</td>
<td>5,500 VA</td>
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<tr>
<td>Rated output voltage</td>
<td>220 V / 230 V / 240 V</td>
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<tr>
<td>Rated AC grid frequency</td>
<td>50 Hz / 60 Hz</td>
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<td>Max. output current</td>
<td>10 A</td>
<td>15 A</td>
<td>16 A</td>
<td>20 A</td>
<td>23 A1</td>
<td>25 A2</td>
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<td>Adjustable power factor</td>
<td>0.8 leading ... 0.8 lagging</td>
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<td>Max. total harmonic distortion</td>
<td>≤ 3 %</td>
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<td>Protection</td>
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<td>Anti-islanding protection</td>
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<td>DC reverse polarity protection</td>
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<td>Insulation monitoring</td>
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<tr>
<td>DC lightening protection</td>
<td>Yes</td>
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<tr>
<td>AC lightening protection</td>
<td>Yes</td>
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<td>Residual current monitoring</td>
<td>Yes</td>
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<td>AC overcurrent protection</td>
<td>Yes</td>
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<td>AC short-circuit protection</td>
<td>Yes</td>
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<td>AC overvoltage protection</td>
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<td>Over-heat protection</td>
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<td>General Data</td>
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<td>Operating temperature range</td>
<td>-30 ~ +60 °C</td>
<td>(Derating above 45°C @ Rated output power)</td>
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<td>Relative operating humidity</td>
<td>0 % - 100 %</td>
<td>(Derating above 2,000 m)</td>
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<td>Operating altitude</td>
<td>0 - 4,000 m</td>
<td>(Derating above 2,000 m)</td>
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<td>Natural convection</td>
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<td>Display</td>
<td>LED indicators</td>
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<td>Communication</td>
<td>RS485, WLAN</td>
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<td>Weight (incl. mounting bracket)</td>
<td>10.6 kg (23.4 lb)</td>
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<tr>
<td>Dimension (incl. mounting bracket)</td>
<td>375 * 375 * 161.5 mm (14.8 * 14.8 * 6.4 inch)</td>
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<td>Degree of protection</td>
<td>IP65</td>
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<td>Battery Compatibility</td>
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<td>Battery</td>
<td>LG Chem RESU 7H, R / 10H, R</td>
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<td>Voltage range</td>
<td>350 ~ 450 Vdc</td>
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<td>Max. current</td>
<td>10 A</td>
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<tr>
<td>Communication</td>
<td>RS485</td>
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<td>Safety</td>
<td>EN/IEC 62109-1, EN/IEC 62109-2</td>
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<td>Standard Compliance</td>
<td>(more available upon request)</td>
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</tbody>
</table>

## Efficiency Curve

1. Only applicable for PV string. The maximum input voltage and operating voltage upper limit will be reduced to 495 V when inverter connects and works with LG battery.

## Circuit Diagram

SUN2000L-2/3/3.68/4/4.6/5KTL

1. Only applicable for PV string. The maximum input voltage and operating voltage upper limit will be reduced to 495 V when inverter connects and works with LG battery.