CSUN250-60P
Standard Solar Product

15.40% 
Module efficiency

250W 
Highest power output

10 year 
Material & Workmanship warranty

25 year 
Linear power output warranty

- Industry leading conversion efficiency
- Positive tolerance offer
- Passed salt mist corrosion testing and ammonia corrosion testing
- Certified to withstand Wind (2400Pa) and Snow load (7200Pa)
- Excellent performance under weak light condition
- Good Temperature Coefficient performance enables better output in the tropical zone

* Note: All specifications, warranties, certifications about module of “CSUN” series also apply to that of “SST”.

All information and data are subject to change without notice.

China Sunergy (Nanjing) Co., Ltd. (NASDAQ: CSUN), established in 2004, is a hi-tech corporation with its core business in R&D, manufacturing, and sale of high efficiency silicon based solar cells and modules.

As one of the leading PV enterprises in the world, CSUN has delivered more than 1GW solar products, to residential, commercial, utility and off-grid projects all around the world.

Through strict selection of raw materials, stringent quality control and rigorous test in state of the art facilities in Nanjing and Shanghai, CSUN has always committed to higher efficiency, more stable and better cost performance products.
Electrical characteristics at Standard Test Conditions (STC)

<table>
<thead>
<tr>
<th>Module type</th>
<th>CSUN 250-60P</th>
<th>CSUN 245-60P</th>
<th>CSUN 240-60P</th>
<th>CSUN 235-60P</th>
<th>CSUN 230-60P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pmpp [W]</td>
<td>250</td>
<td>245</td>
<td>240</td>
<td>235</td>
<td>230</td>
</tr>
<tr>
<td>Voc [V]</td>
<td>37.3</td>
<td>37.1</td>
<td>36.9</td>
<td>36.8</td>
<td>36.7</td>
</tr>
<tr>
<td>Isc [A]</td>
<td>8.81</td>
<td>8.74</td>
<td>8.67</td>
<td>8.59</td>
<td>8.52</td>
</tr>
<tr>
<td>Vmpp [V]</td>
<td>29.9</td>
<td>29.7</td>
<td>29.6</td>
<td>29.5</td>
<td>29.4</td>
</tr>
<tr>
<td>Impp [A]</td>
<td>8.36</td>
<td>8.25</td>
<td>8.11</td>
<td>7.97</td>
<td>7.83</td>
</tr>
<tr>
<td>Practical module efficiency</td>
<td>17.12%</td>
<td>16.78%</td>
<td>16.44%</td>
<td>16.10%</td>
<td>15.75%</td>
</tr>
<tr>
<td>Module efficiency</td>
<td>15.40%</td>
<td>15.09%</td>
<td>14.78%</td>
<td>14.47%</td>
<td>14.17%</td>
</tr>
</tbody>
</table>

Electrical data relates to standard test conditions (STC): irradiance 1000W/m²; AM 1.5; cell temperature 25°C. measuring uncertainty of power is within ±3%. Certified in accordance with IEC61215, IEC61730-1/2 and UL 1703.

Electrical Characteristics at Normal Operating Cell Temperature (NOCT)

<table>
<thead>
<tr>
<th>Module type</th>
<th>CSUN 250-60P</th>
<th>CSUN 245-60P</th>
<th>CSUN 240-60P</th>
<th>CSUN 235-60P</th>
<th>CSUN 230-60P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power-Pmax</td>
<td>185</td>
<td>181</td>
<td>178</td>
<td>175</td>
<td>172</td>
</tr>
<tr>
<td>Maximum Power Voltage-Vmp(V)</td>
<td>27.9</td>
<td>27.5</td>
<td>27.2</td>
<td>27</td>
<td>26.7</td>
</tr>
<tr>
<td>Maximum Power Current-Impp(A)</td>
<td>6.64</td>
<td>6.58</td>
<td>6.54</td>
<td>6.48</td>
<td>6.44</td>
</tr>
<tr>
<td>Open Circuit Voltage(V)-Voc(V)</td>
<td>34.5</td>
<td>34.2</td>
<td>34</td>
<td>33.8</td>
<td>33.6</td>
</tr>
<tr>
<td>Short Circuit Current(A)-Isc(A)</td>
<td>7.1</td>
<td>7.02</td>
<td>6.95</td>
<td>6.9</td>
<td>6.85</td>
</tr>
</tbody>
</table>

Electrical data relates to standard test conditions (NOCT): irradiance 800W/m²; wind speed 1 m/s; cell temperature 45°C; ambient temperature 20°C. measuring uncertainty of power is within ±3%

**Temperature Characteristics**

- Voltage Temperature Coefficient: -0.292%/K
- Current Temperature Coefficient: +0.045%/K
- Power Temperature Coefficient: -0.408%/K

**Maximum Ratings**

- Maximum system voltage(V): 1000
- Series fuse rating(A): 20

**Mechanical Characteristics**

- Dimensions: 1640x990x40mm(L×W×H)
- Weight: 19.1kg
- Frame: Anodized aluminum profile
- Front glass: White toughened safety glass, 3.2mm
- Cell Encapsulation: EVA(Ethylene-Vinyl-Acetate)
- Back Sheet: composite film
- Cells: 6x10 pieces monocrystalline solar cells series strings (156mm×156mm) with 6bypass diodes
- Junction Box: length 900mm,1×4m²
- Cable:

**Packaging**

- Dimensions(L×W×H): 1640x990x40mm
- Container 20': 300
- Container 20'HC: 324
- Container 40': 700
- Container 40'HC: 756

**System Design**

- Temperature range: -40°Cto+85°C
- Hail: maximum diameter of 25mm with impact speed of 23m/s(51.2mph)
- Maximum surface load capacity: 7200pa

**IV-Curves**

Excellent performance under weak light condition.