AS-6M30 PERC

MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 19.05% by using Passivated Emmitter Rear Contact (PERC) technology.
- Low degradation and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- Potential induced degradation (PID) resistance.
- Positive power tolerance of 0 ~ +3 %

CERTIFICATIONS

- IEC61215, IEC61730, IEC62716, IEC61701, CE, CQC, CGC, ETL(USA), JET(Japan), J-PEC(Japan), Kemco(South Korea), KS(South Korea), MCS(UK), CEC(Australia), FSEC(FL-USA), CSI Eligible(CA-USA), Israel Electric(Israel), InMetro(Brazil), TSE(Turkey)
- ISO9001:2008: Quality management system
- ISO14001:2004: Environmental management system
- OHSAS18001:2007: Occupational health and safety management system

SPECIAL WARRANTY

- 12 years limited product warranty.
- Limited linear power warranty: 12 years 91.2% of the nominal power output, 30 years 80.6% of the nominal power output.
**ELECTRICAL CHARACTERISTICS AT STC**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>280W</th>
<th>285W</th>
<th>290W</th>
<th>295W</th>
<th>300W</th>
<th>305W</th>
<th>310W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Power (P_{max})</td>
<td>280W</td>
<td>285W</td>
<td>290W</td>
<td>295W</td>
<td>300W</td>
<td>305W</td>
<td>310W</td>
</tr>
<tr>
<td>Open Circuit Voltage (V_{oc})</td>
<td>38.8V</td>
<td>39.0V</td>
<td>39.2V</td>
<td>39.4V</td>
<td>39.6V</td>
<td>39.8V</td>
<td>40.0V</td>
</tr>
<tr>
<td>Voltage at Nominal Power (V_{mp})</td>
<td>31.6V</td>
<td>31.8V</td>
<td>32.0V</td>
<td>32.2V</td>
<td>32.4V</td>
<td>32.6V</td>
<td>32.8V</td>
</tr>
<tr>
<td>Current at Nominal Power (I_{mp})</td>
<td>8.87A</td>
<td>8.97A</td>
<td>9.07A</td>
<td>9.17A</td>
<td>9.26A</td>
<td>9.36A</td>
<td>9.46A</td>
</tr>
<tr>
<td>Module Efficiency (%)</td>
<td>17.21</td>
<td>17.52</td>
<td>17.83</td>
<td>18.13</td>
<td>18.44</td>
<td>18.75</td>
<td>19.05</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +85°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum System Voltage</td>
<td>1000V DC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Resistance Rating</td>
<td>Type 1 (in accordance with UL1703)/Class C (IEC61730)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Series Fuse Rating</td>
<td>15A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5

**ELECTRICAL CHARACTERISTICS AT NOCT**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>207W</th>
<th>211W</th>
<th>215W</th>
<th>218W</th>
<th>222W</th>
<th>226W</th>
<th>230W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Power (P_{max})</td>
<td>207W</td>
<td>211W</td>
<td>215W</td>
<td>218W</td>
<td>222W</td>
<td>226W</td>
<td>230W</td>
</tr>
<tr>
<td>Open Circuit Voltage (V_{oc})</td>
<td>35.7V</td>
<td>35.9V</td>
<td>36.1V</td>
<td>36.3V</td>
<td>36.5V</td>
<td>36.7V</td>
<td>36.9V</td>
</tr>
<tr>
<td>Short Circuit Current (I_{sc})</td>
<td>7.59A</td>
<td>7.65A</td>
<td>7.72A</td>
<td>7.79A</td>
<td>7.86A</td>
<td>7.93A</td>
<td>8.00A</td>
</tr>
<tr>
<td>Voltage at Nominal Power (V_{mp})</td>
<td>28.8V</td>
<td>29.0V</td>
<td>29.2V</td>
<td>29.4V</td>
<td>29.6V</td>
<td>29.8V</td>
<td>30.0V</td>
</tr>
<tr>
<td>Current at Nominal Power (I_{mp})</td>
<td>7.19A</td>
<td>7.28A</td>
<td>7.37A</td>
<td>7.42A</td>
<td>7.50A</td>
<td>7.59A</td>
<td>7.67A</td>
</tr>
</tbody>
</table>

NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind Speed 1 m/s

**MECHANICAL CHARACTERISTICS**

- **Cell type**: Monocrystalline PERC 156.75x156.75mm (6x6inches)
- **Number of cells**: 60 (6x10)
- **Module dimensions**: 1640x992x35mm (64.57x39.06x1.38inches)
- **Weight**: 18kg (39.7lbs)
- **Front cover**: 3.2mm (0.13inches) tempered glass with AR coating
- **Frame**: Anodized aluminum alloy
- **Junction box**: IP67, 3 diodes
- **Cable**: 4mm² (0.006inches²), 900mm (35.43inches)
- **Connector**: MC4 or MC4 compatible

**TEMPERATURE CHARACTERISTICS**

- Nominal Operating Cell Temperature (NOCT): 45°C±2°C
- Temperature Coefficients of P_{max}: -0.39%/°C
- Temperature Coefficients of V_{oc}: -0.29%/°C
- Temperature Coefficients of I_{sc}: 0.052%/°C

**PACKAGING**

- Standard packaging: 30pcs/pallet
- Module quantity per 20’ container: 360pcs
- Module quantity per 40’ container: 840pcs(GP)/924pcs(HQ)

**ENGINEERING DRAWINGS**

**IV CURVES**

Current-Voltage and Power-Voltage Curves at Different Irradiances

Current-Voltage Curves at Different Temperatures

Specifications in this datasheet are subject to change without prior notice.

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