280 Watt Maximum Power
POLY-CRYSTALLINE SOLAR PANEL

Features
• High conversion efficiency based on leading innovative photovoltaic technologies
• High reliability with guaranteed +/-3% power output tolerance, ensuring return on investment
• Attractive appearance
• Withstands high wind-pressure and snow load, and extreme temperature variations
• Easy to install

Quality and Safety
• 25-year power output transferable warranty with PICC insurance
• Rigorous quality control meeting the highest international standards
• ISO 9001:2000 (Quality Management System) and ISO 14001:2004 (Environmental Management System) certified factories manufacturing world class products
• IEC61215, Safety tested IEC61730, conformity to CE, UL listings: UL1703, cULus, Class C fire rating

Recommended Applications
• On-grid utility systems
• On-grid commercial systems
• Off-grid ground mounted systems

Suntech’s technology yields improvements to BSF structure and anti-reflective coating to increase conversion efficiency
Unique design on drainage holes and rigid construction prevents frame from deforming or breaking due to freezing weather and other forces
The panel provides more field power output through an advanced cell texturing and isolation process, which improves low irradiance performance

Suntech was named Frost and Sullivan’s 2008 Solar Energy Development Company of the Year

www.suntech-power.com | E-mail: sales@suntech-power.com
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### Electrical Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>STP280-24/Vd</th>
<th>STP270-24/Vd</th>
<th>STP260-24/Vd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open - Circuit Voltage (Voc)</td>
<td>44.8V</td>
<td>44.5V</td>
<td>44V</td>
</tr>
<tr>
<td>Optimum Operating Voltage (Vmp)</td>
<td>35.2V</td>
<td>35V</td>
<td>34.8V</td>
</tr>
<tr>
<td>Short - Circuit Current (Isc)</td>
<td>8.33A</td>
<td>8.2A</td>
<td>8.09A</td>
</tr>
<tr>
<td>Optimum Operating Current (Imp)</td>
<td>7.95A</td>
<td>7.71A</td>
<td>7.47A</td>
</tr>
<tr>
<td>Maximum Power at STC (Pmax)</td>
<td>280Wp</td>
<td>270Wp</td>
<td>260Wp</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40ºC to +85ºC</td>
<td>-40ºC to +85ºC</td>
<td>-40ºC to +85ºC</td>
</tr>
<tr>
<td>Maximum System Voltage</td>
<td>1000V DC</td>
<td>1000V DC</td>
<td>1000V DC</td>
</tr>
<tr>
<td>Maximum Series Fuse Rating</td>
<td>20A</td>
<td>20A</td>
<td>20A</td>
</tr>
<tr>
<td>Power Tolerance</td>
<td>±3 %</td>
<td>±3 %</td>
<td>±3 %</td>
</tr>
</tbody>
</table>

STC: Irradiance 1000W/m², Module temperature 25ºC, AM=1.5

### Mechanical Characteristics

- **Solar Cell**: Poly-crystalline 156×156mm (6inch)
- **No. of Cells**: 72 (6x12)
- **Dimensions**: 1956x992x50mm (77.0x39.1x2.0inch)
- **Weight**: 27 kg (59.5lbs.)
- **Front Glass**: 4mm (0.16inch) tempered glass
- **Frame**: Anodized aluminium alloy
- **Junction Box**: IP67 rated
- **Output Cables**: RADOX® SMART cable 4.0mm² (0.006inch²), symmetrical lengths (-) 1000mm (39.4inch) and (+) 1000mm (39.4inch), RADOX® SOLAR integrated twist locking connectors

### Temperature Coefficients

- **Nominal Operating Cell Temperature (NOCT)**: 45±2ºC
- **Temperature Coefficient of Pmax**: (0.055 ± 0.01) %/ºC
- **Temperature Coefficient of Voc**: (0.34 ± 0.01) %/ºC
- **Temperature Coefficient of Isc**: (0.47 ± 0.05) %/ºC

### Current-Voltage & Power-Voltage Curve (260W)

![Current-Voltage & Power-Voltage Curve (260W)](image)

### Temperature Dependence of Isc, Voc, Pmax

![Temperature Dependence of Isc, Voc, Pmax](image)