Temperature Characteristics

- Pmax Temperature Coefficient: -0.36 %/°C
- Voc Temperature Coefficient: -0.30 %/°C (0%/°C at voltage limiting)
- Isc Temperature Coefficient: +0.05 %/°C
- Operating Temperature: -40~+85 °C
- Nominal Operating Cell Temperature (NOCT): 45±2 °C

Electrical Characteristics (STC)

<table>
<thead>
<tr>
<th>Module Type</th>
<th>SRP-270-6PB-HV</th>
<th>SRP-275-6PB-HV</th>
<th>SRP-280-6PB-HV</th>
<th>SRP-285-6PB-HV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power at STC, Pmp (W)</td>
<td>270</td>
<td>275</td>
<td>280</td>
<td>285</td>
</tr>
<tr>
<td>Open Circuit Voltage, Voc (V)</td>
<td>38.1</td>
<td>38.3</td>
<td>38.5</td>
<td>38.7</td>
</tr>
<tr>
<td>Short Circuit Current, Isc (A)</td>
<td>8.99</td>
<td>9.08</td>
<td>9.16</td>
<td>9.27</td>
</tr>
<tr>
<td>Maximum Power Voltage, Vmp (V)</td>
<td>31.3</td>
<td>31.6</td>
<td>31.8</td>
<td>32.0</td>
</tr>
<tr>
<td>Maximum Power Current, Imp (A)</td>
<td>8.63</td>
<td>8.71</td>
<td>8.81</td>
<td>8.91</td>
</tr>
<tr>
<td>Module Efficiency, STC, η (%),</td>
<td>16.30</td>
<td>16.60</td>
<td>17.11</td>
<td>17.41</td>
</tr>
</tbody>
</table>

- Optimizer Max. Output Voltage (V): 360.0
- Power Tolerance (W): ±(0,+4.99)
- Maximum System Voltage (V): 1580
- Maximum Series Fuse Rating (A): 15

Packing Configuration

<table>
<thead>
<tr>
<th>Container</th>
<th>20'GP</th>
<th>40'GP</th>
<th>40'HQ</th>
</tr>
</thead>
</table>
| Pieces per Container | 20 | 30 | 20+2*
| Pieces per Container | 360 | 540 | 896 |

* 30+2 pieces per pallet is the special package which only suits for container transport. For details, please consult SERAPHIM.

Mechanical Specifications

- External Dimensions: 1650 x 992 x 35 mm
- Weight: 18.9 kg
- Solar Cells: Poly crystalline 6 inch (60pcs)
- Frame: 3.2 mm AR coating tempered glass, low iron
- Junction Box: Anodized aluminium alloy
- Connector: IP68
- Output Cables: 4 mm², cable length: 1000 mm

- STC: Insolation 1000 W/m²; module temperature 25°C; AM=1.5
- NOCT: Insolation 800 W/m²; ambient temperature 25°C; wind speed: 1m/s

Specifications are subject to change without further notification.
**MANAGEMENT SYSTEM**

ISO 9001: Quality management system
ISO 14001: Standard for environmental management system
OHSAS 18001: International standard for occupational health and safety assessment system

**WARRANTY**

- Linear power output warranty
- Guarantee on product material and workmanship
- Optimized by Seraphim MX
- 10 years warranty
- 25 years linear power output warranty

**SERAPHIM MX**

*Comparing with conventional product, Seraphim integrated cell-string level optimizer into solar panel and redesigned the module. Trying best to provide advanced smart solution to customers, and improve performance reliability of the solar panels.*

Under any condition, the Seraphim MX can optimize power output to enhance energy harvest. However, conventional modules or panel optimizer product will bypass cell-strings when they underperform. So Seraphim MX will give higher energy production, eliminate hot-spots issues.

Seraphim MX reduces the shading effect significantly, prevents hot-spot formation, and eliminates diode failures. In the meantime, it will lower Operation and Maintenance costs.

Seraphim MX enables flexible PV system design. Best performance with easiest installation.

- Provides 20~35% more modules per string saving BoS cost
- Allows for flexible PV system design
- Higher power density
- Advanced MPPT devices optimize each cell-string individually
- Enhanced energy harvest
- 1500V withstand and applicable up to 1500V high system voltage
- Reduced shading effect
- Prevent Hot-spot
- SRP-(270-285)-6PB-HV

Note: From simulations of PV System in San Jose, CA.