**HIGHLIGHTS OF KYOCERA PHOTOVOLTAIC MODULES**

Kyocera's advanced cell processing technology and automated production facilities have produced a highly efficient multicrystal photovoltaic modules.

The conversion efficiency of the Kyocera solar cell is over 14%.

These cells are encapsulated between a tempered glass cover and an EVA pottant with PVF back sheet to provide maximum protection from the severest environmental conditions.

The entire laminate is installed in an anodized aluminum frame to provide structural strength and ease of installation.

**APPLICATIONS**

- Microwave/Radio repeater stations
- Electrification of villages in remote areas
- Medical facilities in rural areas
- Power source for summer vacation homes
- Emergency communication systems
- Water quality and environmental data monitoring systems
- Navigation lighthouses, and ocean buoys

- Pumping systems for irrigation, rural water supplies and livestock watering
- Aviation obstruction lights
- Cathodic protection systems
- Desalination systems
- Recreational vehicles
- Railroad signals
- Sailboat charging systems

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Electrical Specifications</th>
<th>Physical Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODEL</strong></td>
<td>KC50</td>
</tr>
<tr>
<td><strong>Maximum Power</strong></td>
<td>50 Watts</td>
</tr>
<tr>
<td><strong>Maximum Power Voltage</strong></td>
<td>16.7 Volts</td>
</tr>
<tr>
<td><strong>Maximum Power Current</strong></td>
<td>3.00 Amps</td>
</tr>
<tr>
<td><strong>Open Circuit Voltage</strong></td>
<td>21.5 Volts</td>
</tr>
<tr>
<td><strong>Short-Circuit Current</strong></td>
<td>3.10 Amps</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>639mm (25.2in.)</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>652mm (25.7in.)</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>54mm (2.1in.)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>5.0kg (11.0lbs.)</td>
</tr>
</tbody>
</table>

Note: The electrical specifications are under test conditions of irradiance of 1 kW/m², Spectrum of 1.5 air mass and cell temperature of 25°C.

Kyocera reserves the right to modify these specifications without notice.
ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics of Photovoltaic Module KC50 at various cell temperatures

CURRENT: AM1.5 1kW/m²

<table>
<thead>
<tr>
<th>IRRADIANCE: AM1.5 kW/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>750</td>
</tr>
<tr>
<td>50°C</td>
</tr>
<tr>
<td>25°C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOLTAGE (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>30</td>
</tr>
</tbody>
</table>

QUALITY ASSURANCE

Kyocera multicrystalline photovoltaic modules exceed government specifications for the following tests:
- Thermal cycling test
- Thermal shock test
- Thermal/Freezing and high humidity cycling test
- Electrical isolation test
- Hail impact test
- Mechanical, wind and twist loading test
- Salt mist test
- Light and water-exposure test
- Field exposure test

Please contact our office to obtain details without hesitation.

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