KD95SX-1P
High efficiency multicrystal photovoltaic module

As a pioneer in the photovoltaic sector, Kyocera Solar can look back on over 35 years of experience. We are also involved in numerous future-oriented solutions across the world. Our focus is on innovation and quality.

Our vision: To make solar energy accessible to everybody and to ensure a comprehensive sustained energy supply.

**Cutting-edge Technology**

- **Cell:**
  - 104 mm x 156 mm
  - Polycrystalline, 3-busbar
  - >16% efficiency
  - Embedded in EVA film
  - Patented RIE process: very little light reflection, homogenous dark coloration

- **Frame:**
  - Aluminium, anodised and coated
  - Screwed and also adhered
  - Strength: 2,400 N/m²
  - Drainage openings to protect against frost damage
  - Flexible assembly (horizontal and upright)

- **Junction box:**
  - Incl. bypass diodes
  - Over-voltage proof Si-p/n bypass diodes
  - Accessible junction box for flexible installation

- **Pairing:**
  - Sorting procedure: Nominal output is achieved by two paired modules (≥ 190 Wp for 2 × KD95SX-1P)

- **Production:**
  - Fully automated and integrated production processes in our own production plants
  - No intermediate products are purchased
  - 100% final inspection

- **Service:**
  - Professional Europe-wide customer service in Esslingen/Germany

**Company**

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*We care! Since 1975.*
**SPECIFICATIONS**

Current-Voltage characteristics at various cell temperatures

```
<table>
<thead>
<tr>
<th>Irradiance: AM 1.5, 1 kW/m²</th>
<th>Current (A)</th>
<th>Voltage (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°C</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>50°C</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>25°C</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
```

Current-Voltage characteristics at various irradiance levels

```
<table>
<thead>
<tr>
<th>Cell temperature 25 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current (A)</td>
</tr>
<tr>
<td>1000 W/m²</td>
</tr>
<tr>
<td>800 W/m²</td>
</tr>
<tr>
<td>600 W/m²</td>
</tr>
<tr>
<td>400 W/m²</td>
</tr>
<tr>
<td>200 W/m²</td>
</tr>
</tbody>
</table>
```

**ELECTRICAL CHARACTERISTICS**

Current-Voltage characteristic at various cell temperatures

**ELECTRICAL PERFORMANCE**

PV Module Type: KD95SX-1P

- **At 1000 W/m² (STC)**
  - Maximum Power: 95 W
  - Maximum System Voltage: 750 V
  - Maximum Power Voltage: 17.9 V
  - Maximum Power Current: 5.31 A
  - Open Circuit Voltage: 22.1 V
  - Short Circuit Current: 5.81 A
  - Efficiency: 13.8%

- **At 800 W/m² (NOCT)**
  - Maximum Power: 67 W
  - Maximum Power Voltage: 15.8 V
  - Maximum Power Current: 4.24 A
  - Open Circuit Voltage: 19.9 V
  - Short Circuit Current: 4.75 A
  - NOCT: 49 °C

- **Power Tolerance**
  - [%] +10 / – 5

- **Maximum Reverse Current**
  - [%] 10

- **Temperature Coefficient of Voc**
  - [%] 0.36

- **Temperature Coefficient of Isc**
  - [%] 0.06

- **Reduction of Efficiency (from 1000W/m² to 200 W/m²)**
  - [%] 5.3

**DIMENSIONS**

- **Length**: 1043 (± 2.5) mm
- **Width**: 660 (± 2.5) mm
- **Depth / incl. Junction Box**: 36 / 45 mm
- **Weight**: 8.5 kg
- **Connection Type**: Screw Terminals
- **Junction Box**: 140 × 150 × 37.2 mm
- **Number of bypass diodes**: 2
- **IP Code**: IP65

**CELLS**

- **Number per Module**: 36
- **Cell Technology**: polycrystalline
- **Cell Shape**: 104 × 156 mm
- **Cell Bonding**: 3-busbar

**GENERAL INFORMATION**

- **Performance Guarantee**: 10*** / 20 years ****
- **Warranty**: 5 years *****

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* Electrical values under standard test conditions (STC): irradiation of 1000 W/m², air mass AM 1.5, and cell temperature of 25°C
** Electrical values under normal operating cell temperature (NOCT): irradiation of 800 W/m², air mass AM 3.5, wind speed of 2 m/s and ambient temperature of 20°C
*** 10 years on 90% of the minimally specified power P under standard test conditions (STC)
**** 20 years on 80% of the minimally specified power P under standard test conditions (STC)
***** In the case of Europe

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Your local Kyocera dealer: