Features

- High conversion efficiency based on leading innovative photovoltaic technologies
- High reliability with guaranteed 0–+4.99 Wp power output tolerance, ensuring return on investment
- Withstands high wind-pressure and snow load (passed 5400Pa mechanical loading test), and extreme temperature variations
- Optimal output over decades, with very good low light response

Quality and Safety

- 25-year limited power output warranty **
- Rigorous quality control meeting the highest International standards
- ISO 14001 (Environment Health and Safety) Certified Factory
- ISO 9001:2008 (Quality Management System) Certified Factory
- TUV : IEC 61215, IEC 61730, IEC 61701, MNRE
- Strict adherence to Electroluminescence Testing ensuring micro-crack free Modules

Recommended Applications

- On-grid utility systems
- On-grid commercial systems
- Off-grid ground mounted systems

An IP65 rated junction box consisting of serial or parallel connections of photovoltaic arrays and new positive latching connectors, highly protected from moisture, dust and water. Helps in proper power generation and measurement of electrical output. Consists of 10A diodes, which prevent power loss resulting in no effect on output. Protects from fire too.

Eva coated back sheets are adhesive in nature thus helps in proper encapsulation which prevents moisture penetration. Has high electrical insulation and remains untorned in harsh weather conditions. Toughened and textured glass, with low iron content and transmission ability more than 92%.

High efficiency anti reflection coating cells with advanced texturing and passivation process which provides enhanced power output.

High quality interconnecting ribbons used as a conductor which reduces power loss and increases efficiency and life of the solar module. This ribbon ensures the best solderability between solar cells.
**Electrical data - All data refers to STC (AM 1.5, 1000w/m², 25°C)**

<table>
<thead>
<tr>
<th>Type</th>
<th>ELV 37</th>
<th>ELV 40</th>
<th>ELV 45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal power Pmpp (Wp)</td>
<td>37</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>Nominal voltage Vmpp (V)</td>
<td>17.00</td>
<td>17.10</td>
<td>17.70</td>
</tr>
<tr>
<td>Nominal current Impp (A)</td>
<td>2.25</td>
<td>2.35</td>
<td>2.55</td>
</tr>
<tr>
<td>Open circuit voltage Voc (V)</td>
<td>21.80</td>
<td>21.90</td>
<td>21.90</td>
</tr>
<tr>
<td>Short circuit current Isc (A)</td>
<td>2.40</td>
<td>2.45</td>
<td>2.70</td>
</tr>
<tr>
<td>Module efficiency (%)</td>
<td>10.10</td>
<td>10.90</td>
<td>12.80</td>
</tr>
</tbody>
</table>

*Electrical Parameters tolerance: ± 3% except Pmpp*

**Temperature coefficients (Tc) and permissible operating conditions**

- Tc of Open circuit voltage (β): -0.32 % /°C
- Tc of short circuit current (α): 0.04 % /°C
- Tc of Power (γ): -0.45 % /°C
- Maximum system voltage: 1000 V (TUV)
- NOCT: 45°C ± 2°C
- Temperature range: -40°C to + 85°C

*NOCT irradiance 800 w/m², ambient temperature 20°C, wind speed 1 m/sec

**Mechanical specification**

- Length: 552 ± 1.5 mm
- Width: 666 ± 1.5 mm
- Height: 34 mm
- Weight: 4 Kgs
- Junction Box: IP65, 1 bypass diode
- Application class: CLASS A (Safety class II)
- Front cover: High Transmission, Low Iron, Tempered Glass
- Cells: 36 pcs poly-crystalline solar cells, 2BB & 3BB
- Cell encapsulation: EVA (Ethylene Vinyl Acetate)
- Back cover: Composite film
- Frame: Anodized aluminium frame with twin wall profile
- Maximum surface load capacity: According to IEC 61215, 5400 Pa

**Guarantees and Certifications**

- Product Warranty: 5 Years
- Performance Guarantee: Guaranteed Power Output of 90% for 10 Years and 80% for 25 Years
- Approvals and certificates: MNRE, TUV: IEC 61215, IEC 61730, IEC 61701

**Packing Information**

- Quantity/Pallet: 58
- Pallets/Container (40’HC): 24
- Quantity/Container (20’HC): 1392

*Packaging included in this datasheet are subject to change without notice. Electrical data without guarantee.

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