High Performance Full Cell Photovoltaic Modules

5BB MONO PERC CRYSTALLINE MODULE
395W-400W-405W-410W

Key Features:

- High Efficiency Mono Perc Solar Cells
- Higher Power Output
- High Snow (5400Pa) and Wind Loads (2400Pa)
- Excellent Outstanding Weather-Resistance
- Dual EL Inspection
- Excellent Low Light Performance

Linear High Performance Guaranteed

10 Years Product Warranty on 90.88% of the Nominal Performance¹
25 Years Linear Power Output Warranty on 80.68% of the Nominal Performance¹

Certifications

- IEC 61215, IEC 61730: ID 1111220240
- IEC 62716:2013, EN 62716:2013: ID 1111223965
- IS 14286 / IEC 61215, IS/IEC 61730 - 1&2: R- 41151432
- Management system TÜV-Certified
- ISO 9001:2015: ID 011001317684
- ISO 14001: 2015: ID 011041317684
- ISO 45001: 2018: ID 011131815622

¹According to the IFRI-SOL Product and Performance Warranty
Electrical Specification

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Nominal Power Pmpp</th>
<th>Nominal Voltage Umpp</th>
<th>Nominal Current Impp</th>
<th>Open Circuit Voltage (Uoc)</th>
<th>Short Circuit Current (Isc)</th>
<th>Module Conversion Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-M395-72</td>
<td>395Wp</td>
<td>40.89V</td>
<td>9.66A</td>
<td>48.84V</td>
<td>10.16A</td>
<td>19.94%</td>
</tr>
<tr>
<td>IF-M400-72</td>
<td>400Wp</td>
<td>41.29V</td>
<td>9.69A</td>
<td>49.24V</td>
<td>10.18A</td>
<td>20.19%</td>
</tr>
<tr>
<td>IF-M405-72</td>
<td>405Wp</td>
<td>41.69V</td>
<td>9.72A</td>
<td>49.64V</td>
<td>10.20A</td>
<td>20.44%</td>
</tr>
<tr>
<td>IF-M410-72</td>
<td>410Wp</td>
<td>42.09V</td>
<td>9.75A</td>
<td>50.04V</td>
<td>10.22A</td>
<td>20.70%</td>
</tr>
</tbody>
</table>

Electrical Data At STC (STANDARD TEST CONDITIONS): 1000W/m² Irradiance, 25°C Cell Temperature, AM1.5g Spectrum According to EN 60904-3.

Manufacturing Tolerance (Pmax,Voc,Isc) : ±3%

NMOT

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Nominal Power Pmpp</th>
<th>Nominal Voltage Umpp</th>
<th>Nominal Current Impp</th>
<th>Open Circuit Voltage (Uoc)</th>
<th>Short Circuit Current (Isc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF-M395-72</td>
<td>289.50Wp</td>
<td>37.70V</td>
<td>7.68A</td>
<td>45.10V</td>
<td>8.23A</td>
</tr>
<tr>
<td>IF-M400-72</td>
<td>293.30Wp</td>
<td>38.10V</td>
<td>7.70A</td>
<td>45.50V</td>
<td>8.25A</td>
</tr>
<tr>
<td>IF-M405-72</td>
<td>297.10Wp</td>
<td>38.50V</td>
<td>7.72A</td>
<td>45.90V</td>
<td>8.27A</td>
</tr>
<tr>
<td>IF-M410-72</td>
<td>301.10Wp</td>
<td>38.90V</td>
<td>7.74A</td>
<td>46.30V</td>
<td>8.29A</td>
</tr>
</tbody>
</table>

Electrical Data At NMOT: 800W/m² Irradiance, 20°C Ambient Temperature, 1m/s Wind Speed. Manufacturing Tolerance (Pmax,Voc,Isc): ±3%

Design

Front Glass: 3.2mm High Transmission Low Iron Tempered Glass, AR Coated
Encapsulant: Ethylene Vinyl Acetate (E.V.A)
Cell: SBB PERC Mono-Crystalline /158.75 x158.75mm/ 72 Pcs
Backside: Composite Film (White, Black, …)
Frame: 35mm Anodized Aluminum (Silver/Black)

Power Connection

Junction Box: IP68 Junction Box With 3 Bypass Diodes
Solar Cable: Length 1200 mm , 4mm² Prefabricated with Latching Type Connectors
Safety Class: Class II (According to IEC 61140)

Packaging specification

Dimensions (L×W×H): 2002mm x1150mm x1145 mm
Modules Qty per Carton: 31
Modules Qty per Container 20": 310
Modules Qty per Container 40" HC: 737

Current-Voltage/Power-Voltage Curves, IF-M395-72

Performance at low irradiance:
Outstanding performance at low irradiance, with an average relative efficiency of 96.48% from irradiances, between 1000W/m² and 200 W/m² (AM 1.5, 25°C).

Temperature Coefficients

<table>
<thead>
<tr>
<th>Voltage Uoc (β)</th>
<th>-0.30%/°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Isc (α)</td>
<td>+0.06%/°C</td>
</tr>
<tr>
<td>Output Power (γ)</td>
<td>-0.38%/°C</td>
</tr>
<tr>
<td>NMOT</td>
<td>45±2°C</td>
</tr>
</tbody>
</table>

Operating conditions

Maximum System Voltage: 1500VDC
Maximum Series Fuse: 20A
Operating Temperature Range: From -40°C to 85°C
Mechanical Load Test (Front/back): 5400Pa/2400Pa

Current-Voltage/Power-Voltage Curves, IF-M395-72

Mechanical Specification

Dimensions (L×W×H): 1977mm x1002mm x35mm (±1mm)
Weight: 23.5Kg