ELAN PRIDE Series
MBB P-Type PERC Half-cut
Bifacial PV Modules

ASB-M12-132-AAA (AAA=630-650) | 132 Cells | 630-650 Wp

Highlights

- MBB cell technology - excellent anti-microcracking performance with more balanced interior stress; grid pattern current path, lower cost
- Up to 730 Wp at 15% Bifaciality Gain **
- Characterised for 1000 W/m² & 200 W/m² on the front and rear side respectively
- 70 ± 5% bifaciality factor
- Least Degradation for LID & LeTID with Ga doped Technology
- High salt mist and ammonia resistance

Higher generation due to bifacial technology

Bifacial technology

![Graph showing degradation rate over time for Adani bifacial module and Standard Monofacial module](chart.png)
**Technical Data**

Multi irradiance curve for ASB-M12-132-AAA

**Dimensions in mm**

![Dimensions Diagram]

- Cell temp: 25°C

**Electrical data – All data measured to STC**

<table>
<thead>
<tr>
<th>Electrical Specification</th>
<th>Only front (STC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak power, (O ~ = 4.99 Wp)</td>
<td>Max(Wp)</td>
</tr>
<tr>
<td>Maximum voltage, Vmpp (V)</td>
<td>36.66</td>
</tr>
<tr>
<td>Maximum current, Impp (A)</td>
<td>17.19</td>
</tr>
<tr>
<td>Open circuit voltage, Voc (V)</td>
<td>42.87</td>
</tr>
<tr>
<td>Short circuit current, Isc (A)</td>
<td>18.57</td>
</tr>
<tr>
<td>Module efficiency (%)</td>
<td>20.23</td>
</tr>
</tbody>
</table>

*STC: Irradiance 1000 W/m², cell temperature 25°C; Average efficiency reduction of 4.5 % at 200 W/m² according to EN 60904-3.

**Electrical Characteristics with different rear side power gain (Reference 640 Wp Front)**

<table>
<thead>
<tr>
<th>Electrical Specification</th>
<th>Pmax gain from rear side*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifacility Gain</td>
<td>5%</td>
</tr>
<tr>
<td>Peak power, (O ~ = 4.99 Wp)</td>
<td>670</td>
</tr>
<tr>
<td>Maximum voltage, Vmpp (V)</td>
<td>37.01</td>
</tr>
<tr>
<td>Maximum current, Impp (A)</td>
<td>18.00</td>
</tr>
<tr>
<td>Open circuit voltage, Voc (V)</td>
<td>42.91</td>
</tr>
<tr>
<td>Short circuit current, Isc (A)</td>
<td>19.57</td>
</tr>
<tr>
<td>Module efficiency (%)</td>
<td>21.47</td>
</tr>
</tbody>
</table>

* Power gain from rear side depends upon the ground reflectance (Albedo) & Bifaciality factor.

**Temperature co-efficients (Tc) and permissible operating conditions**

- Tc of open circuit voltage (β) -0.29% /°C
- Tc of short circuit current (α) 0.05 % /°C
- Tc of power (γ) -0.35 % /°C
- Maximum system voltage 1500 V (IEC & UL)
- NOCT 44°C ± 2°C
- Temperature range -40°C to + 85°C

**Mechanical data**

- Length 2390 mm
- Width 1303 mm
- Height 35 mm
- Weight 33.6 kg
- Junction box IP68; Junction box, MC4 compatible
- Cable and connectors 300 mm length cable, MC4 B Amphenol compatible connectors
- Application class Class A (Safety class II)
- Superstrate High transmittance ARC glass (3.2 mm)
- Cells 132 half-cut mono-crystalline P-type PERC bifacial solar cells; MBB
- Encapsulation High volume resistivity and low MVTR
- Substrate Transparent Backsheet
- Frame Anodized Frame
- Maximum series fuse rating 35 A

**Packaging Configuration**

- Container 40’HC
- Pieces / Container 55B

**Disclaimer:** Pieces/Container will change subject to Packing design Modification.

**Note:**
- The specifications included in this datasheet are subject to change without notice.
- The electrical data given here is for reference purpose only.
- Please confirm your exact requirements with the sales representative while placing your order.
- **Warranty:** Please read Adani solar warranty documents thoroughly.
- **Caution:** Please read safety and installation instructions before using the product.

*All certifications are under process*