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

ASB-M12-120-AAA (AAA=590-610) |120 Cells |590-610 Wp

Highlights

- MBB cell technology - excellent anti-microcracking performance with more balanced interior stress; grid pattern current path, lower cost
- Up to 690 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

- Adani bifacial module
- Standard Monofacial module

*Coming Soon*
Technical Data

Multi irradiance curve for ASB-M12-120-AAA

Dimensions in mm

Warranty and certifications

Product warranty**
12 years of product warranty

Performance guarantee**
Power degradation <2.0 % in first year <0.55 % / year in 2-30 years

Approvals and certificates*: IEC 61215 Ed2, IEC 61730, IEC 61701, UL 1703, MCS, JET, CEC, CEC-Aus, IEC 62716, IEC 62782, IEC 60068-2-68, IEC 61853, BIS

*All certifications are under process

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, (Q £ 4.99 Wp)</td>
<td>590 595 600 605 610</td>
</tr>
<tr>
<td>Pmax(Wp)</td>
<td>34.50 34.65 34.80 34.95 35.10</td>
</tr>
<tr>
<td>Maximum voltage, Vmpp (V)</td>
<td>34.14 34.21 34.28 34.35 34.42</td>
</tr>
<tr>
<td>Maximum current, Impp (A)</td>
<td>17.14 17.21 17.28 17.35 17.42</td>
</tr>
<tr>
<td>Open circuit voltage, Voc (V)</td>
<td>41.40 41.55 41.71 41.84 42.00</td>
</tr>
<tr>
<td>Short circuit current, Isc (A)</td>
<td>18.16 18.24 18.31 18.39 18.45</td>
</tr>
<tr>
<td>Module efficiency (%)</td>
<td>20.78 20.96 21.13 21.21 21.48</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 60904-1. Except Pmpp, all other parameters have a tolerance of ± 0.3 % measurement uncertainty ± 0.3 %

Electrical Characteristics with different rear side power gain (Reference 600 Wp Front)

<table>
<thead>
<tr>
<th>Electrical Specification</th>
<th>Pmax gain from rear side*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bifaciality Gain</td>
<td>5% 10% 15% 20%</td>
</tr>
<tr>
<td>Peak power, (Q £ 4.99 Wp)</td>
<td>630 660 690 720</td>
</tr>
<tr>
<td>Pmax(Wp)</td>
<td>34.80 34.84 34.81 34.81</td>
</tr>
<tr>
<td>Maximum voltage, Vmpp (V)</td>
<td>18.14 18.98 21.47 22.36</td>
</tr>
<tr>
<td>Maximum current, Impp (A)</td>
<td>41.71 41.71 41.71 41.71</td>
</tr>
<tr>
<td>Open circuit voltage, Voc (V)</td>
<td>19.32 20.21 21.13 22.05</td>
</tr>
<tr>
<td>Short circuit current, Isc (A)</td>
<td>22.19 23.25 24.30 25.36</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) 0.045 % /°C
Tc of power (γ) -0.32 % /°C

Maximum system voltage 1500 V (IEC & UL)

NOCCT 44°C ± 2°C

Temperature range -40°C to +85°C

Mechanical data

Length 2179 mm
Width 1303 mm
Height 35 mm
Weight 312 kg

Junction box IP68; Junction box, MC4 compatible

Cable and connectors 300 mm length cable, MC4 & Amphenol compatible connectors

Application class Class A (Safety class II)

Superstrate High transmittance ARC glass (3.2 mm)

Cells 120 Half-cut Mono Crystalline P-Type PERC Bifacial Cells; MBB

Encapsulation High volume resistivity and low MVTR

Substrate Transparent Backsheet

Frame Anodized Frame

Mechanical load test as per IEC & UL 5400 Pa-front; 2400 Pa-back

Maximum series fuse rating 35 A

Packaging configuration

<table>
<thead>
<tr>
<th>Container</th>
<th>40’HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pallets / Container</td>
<td>18</td>
</tr>
<tr>
<td>Pieces / Container</td>
<td>55B</td>
</tr>
</tbody>
</table>

**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.

This is preliminary datasheet and subjected to change after final ECN.