



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



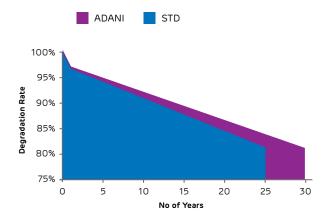
High salt mist and ammonia resistance



Higher generation due to bifacial technology

Standard Monofacial module Adani bifacial module 130% 120% 100% 80% 60% 40% 20% 0%

Bifacial technology

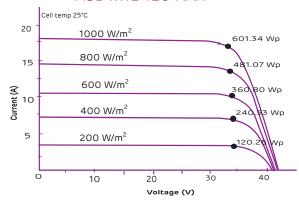


Coming Soon

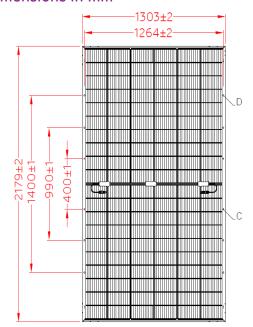
Solar

Technical Data

Multi irradiance curve for ASB-M12-120-AAA

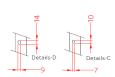


Dimensions in mm









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*

Electrical Specification	Only front (STC)				
Peak power, (0 ~+ 4.99 Wp) Pmax(Wp)	590	595	600	605	610
Maximum voltage, Vmpp (V)	34.50	34.65	34.80	34.95	35.10
Maximum current, Impp (A)	17.14	17.21	17.28	17.35	17.42
Open circuit voltage, Voc (V)	41.40	41.55	41.71	41.84	42.00
Short circuit current, Isc (A)	18.16	18.24	18.31	18.39	18.45
Module efficiency (%)	20.78	20.96	21.13	21.31	21.48

*STC: Irradiance 1000 W/m², cell temperature 25°C, Air mass AM1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m² according to EN 60904-1. Except Pmpp, all other parameters have a tolerance of +/-3 %, measurement uncertainty <3 %

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

Electrical Specification	Pmax gain from rear side*			
Bifaciality Gain	5%	10%	15%	20%
Peak power, (0 ~+ 4.99 Wp) Pmax(Wp)	630	660	690	720
Maximum voltage, Vmpp (V)	34.80	34.80	34.81	34.81
Maximum current, Impp (A)	18.14	18.98	21.47	22.36
Open circuit voltage, Voc (V)	41.71	41.71	41.71	41.71
Short circuit current, Isc (A)	19.32	20.21	21.13	22.05
Module efficiency (%)	22.19	23.25	24.30	25.36

^{*} 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)	-0.35 % /°C		
Maximum system voltage	1500 V (IEC & UL)		
NOCT	44°C ± 2°C		
Temperature range	-40°C to + 85°C		

2179 mm

Mechanical data Length

Length	21/3 111111
Width	1303 mm
Height	35 mm
Weight	31.2 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- Ty pe 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

35 A

Maximum series fuse rating Packaging configuration

Container	40'HC		
Pallets / Container	18		
Pieces / Container	558		

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

- 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.

Please read safety and installation instructions before using the product.