Coming Soon





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



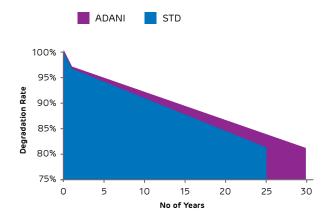
High salt mist and ammonia resistance



Higher generation due to bifacial technology

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

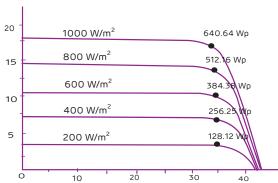
Bifacial technology



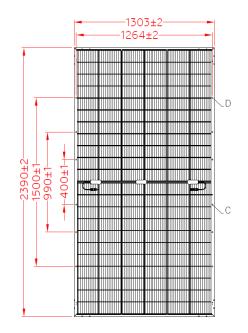
Technical Data

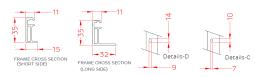
Multi irradiance curve for ASB-M12-132-AAA

Cell temp: 25°C



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















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Electrical data - All data measured to STC*

Electrical Specification		Only front (STC)			
Peak power, (0 ~+ 4.99 Wp) Pmax(Wp)	630	635	640	645	650
Maximum voltage, Vmpp (V)	36.66	36.82	37.01	37.15	37.32
Maximum current, Impp (A)	17.19	17.25	17.31	17.37	17.44
Open circuit voltage, Voc (V)	42.87	43.08	43.28	43.47	43.66
Short circuit current, Isc (A)	18.57	18.63	18.69	18.75	18.85
Module efficiency (%)	20.23	20.39	20.55	20.71	20.87

*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 640 Wp Front)

Pmax gain from rear side*				
5%	10%	15%	20%	
670	700	730	765	
37.01	37.01	37.01	37.01	
18.00	18.91	19.84	20.06	
42.91	42.91	42.91	42.91	
19.57	20.47	21.36	22.35	
21.47	22.43	23.50	24.64	
	5% 670 37.01 18.00 42.91 19.57	5% 10% 670 700 37.01 37.01 18.00 18.91 42.91 42.91 19.57 20.47	5% 10% 15% 670 700 730 37.01 37.01 37.01 18.00 18.91 19.84 42.91 42.91 42.91 19.57 20.47 21.36	

 $^{^{}st}$ 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

Mechanical data		
Length	2390 mm	
Width	1303 mm	
Height	35 mm	
Weight	33.6 kg	
Junction box	IP68; Junction box, MC4 compatibl	
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	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	
Mechanical load test as per IEC & UL	5400 Pa-front; 2400 Pa-back	
Maximum series fuse rating	35 A	

Packaging Configuration

Container	40'HC	
Pieces / Container	558	

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

Vote:

- 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.