adani Solar

ELAN PRIDE Series

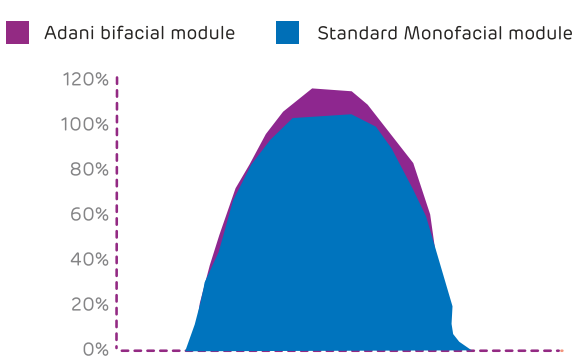
MBB P-Type PERC Half-cut Bifacial PV Modules

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

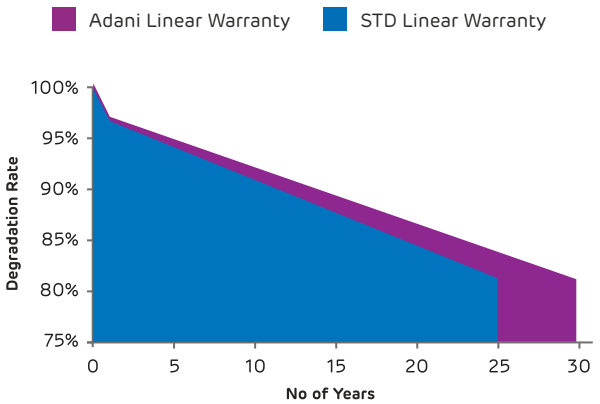
Highlights

- 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**
  Up to 70 ± 5 % bifaciality Factor
- Longer Product life and performance -0.45 year over year degradation with 30 years warranty on power
- Least Degradation for LID , LeTID
- Modules Made with Ga doped wafer,
  Smart soldering , 12BB
- High salt mist and ammonia resistance

Higher generation due to bifacial technology



Warranty based on Power



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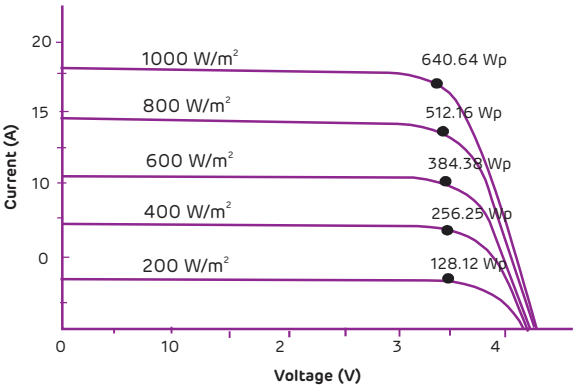
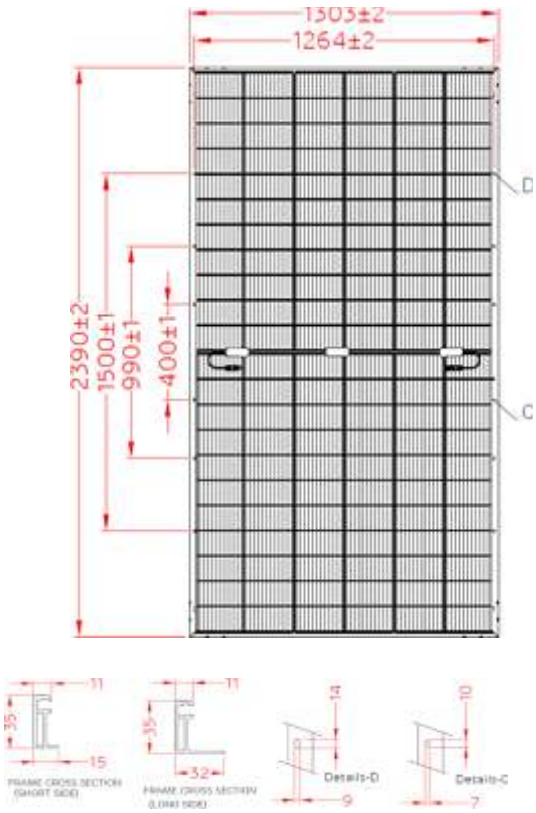
Technical Data

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

Recyclable packaging

EU-28 WEEE COMPLIANT

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, ir 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)

Electrical Specification	Pmax gain from rear side*			
Bifaciality Gain	5%	10%	15%	20%
Peak power, (0 ~+ 4.99 Wp) Pmax(Wp)	670	700	730	765
Maximum voltage, Vmpp (V)	37.01	37.01	37.01	37.01
Maximum current, Impp (A)	18.00	18.91	19.84	20.06
Open circuit voltage, Voc (V)	42.91	42.91	42.91	42.91
Short circuit current, Isc (A)	19.57	20.47	21.36	22.35
Module efficiency (%)	21.51	22.48	23.44	24.57

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

Temperature co-efficients (Tc) and permissible operating conditions

T_c of open circuit voltage (β)	-0.25% /°C
T_c of short circuit current (α)	0.041 % /°C
T_c of power (γ)	-0.34 % /°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	39.9 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	2.0mm High Transmission ARC, Heat Strengthened Glass
Cells	132 half-cut mono-crystalline P-type PERC bifacial solar cells; MBB
Encapsulation	High volume resistivity and low MVTR
Substrate	Semi Tempered Glass -2.0 mm
Frame	Anodized Frame
Mechanical load test as per IEC & UL	5400 Pa-front; 2400 Pa-back*
Maximum series fuse rating	30 A

Packaging Configuration

Container	**40'HC**
Pieces / Container	558

**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.

Authorized distributor: Loop Solar