

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

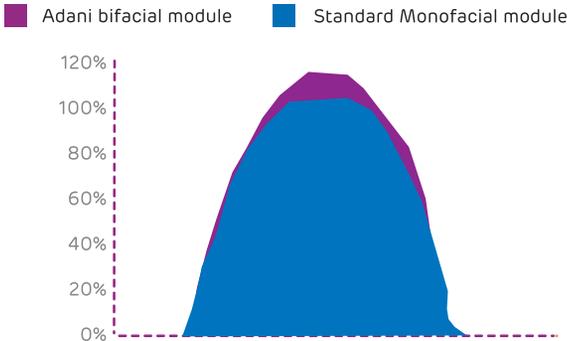


Modules Made with Ga doped wafer, Smart soldering , 12BB

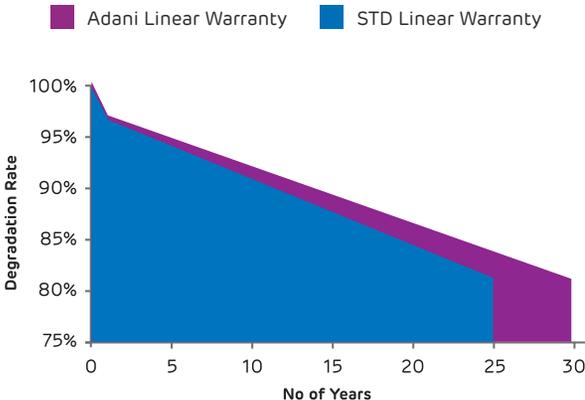


High salt mist and ammonia resistance

Higher generation due to bifacial technology



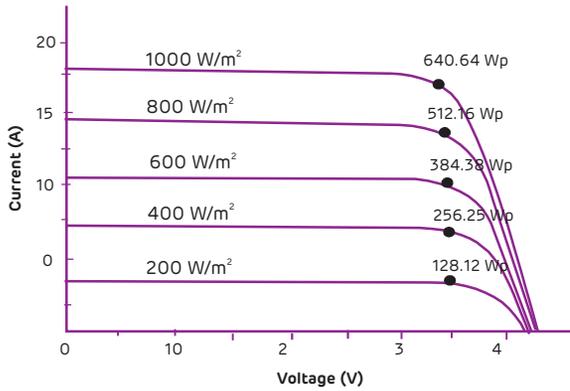
Warranty based on Power



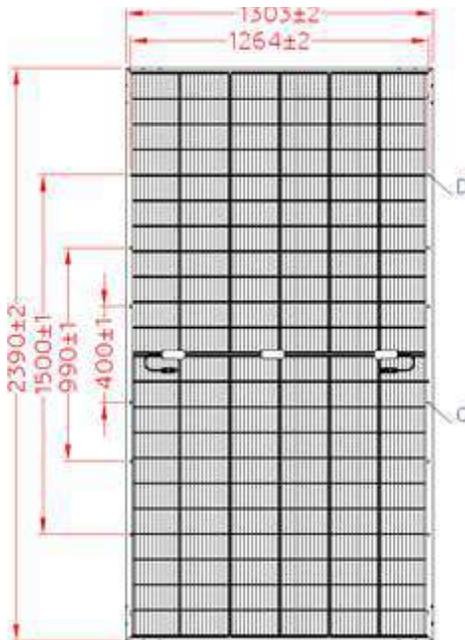
Technical Data

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



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, Imp (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 Pmp, 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, Imp (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

| | |
|---------------------------------|-------------------|
| Tc of open circuit voltage (β) | -0.25% /°C |
| Tc of short circuit current (α) | 0.041% /°C |
| Tc 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