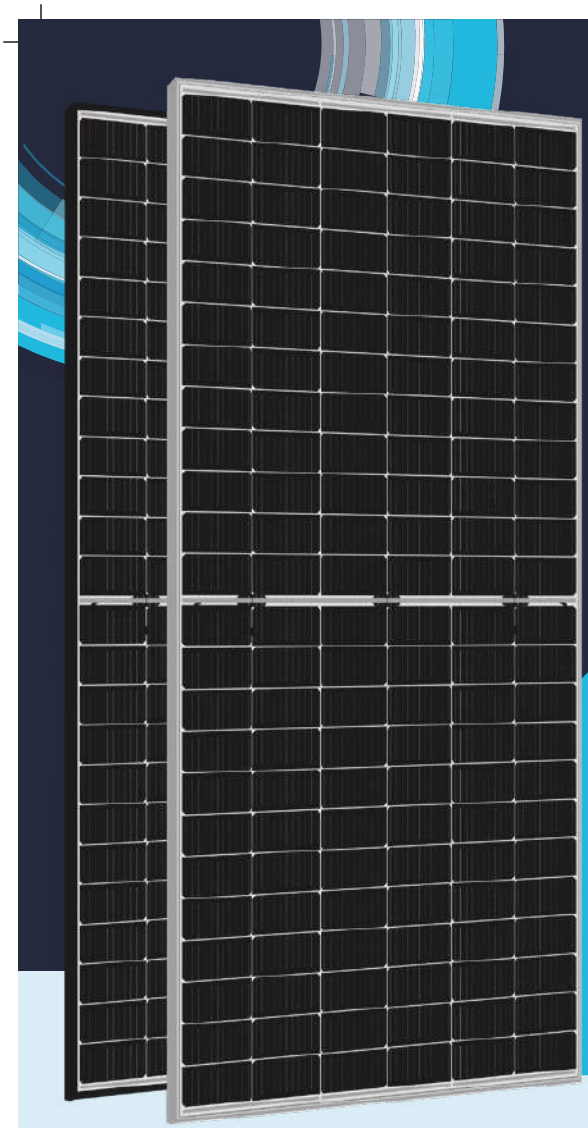
adani
Solar

ELAN SHINE
TOPCON Series

N-type
Bifacial Transparent Backsheet Modules

ASB-M10-144-AAA (AAA=550-575)
144 Cells | 550-575 Wp | Gen-II

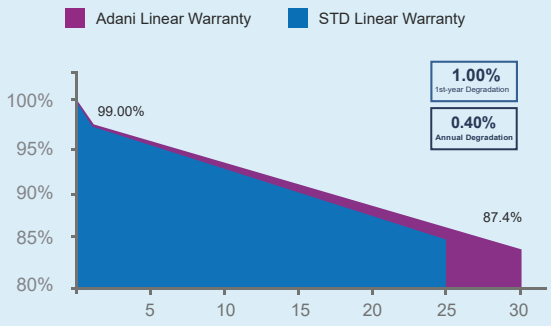


575+ Wp
Maximum Power Output

22.28%
Maximum Efficiency

0~+5W
Power Tolerance

Linear Performance Warranty



Highlights

- **Up to 30% Additional Power Gain** when compared with conventional P-type module
- **No LID Loss -** Higher power generation
- **Better Output In Low Irradiance-** Higher power output even under low-light environments like on cloudy or foggy days
- **Better Temperature Coefficient-** Higher power generation under higher ambient temperature conditions
- **Bifaciality Factor 80 ± 5 %**

Delivers Reliable Performance Over Time

- Full-automatic facility and industry-leading technology
- Best-in-class durability and reliability

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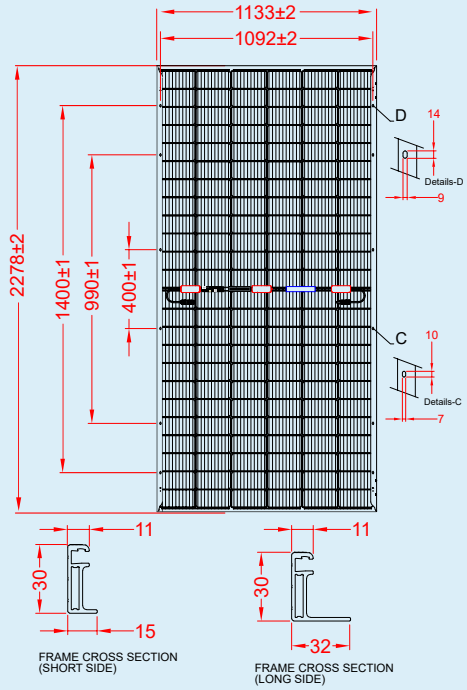
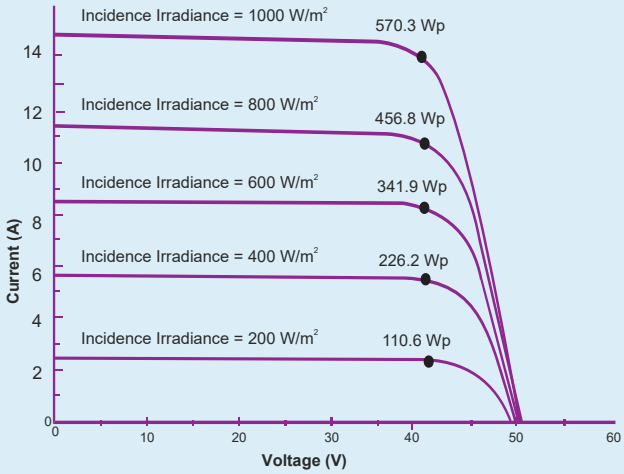
Dimensions in mm



Technical Data

Multi Irradiance Curve
Bifacial M10-144 HC Cell Module

Cell temp: 25°C



Electrical data - All data measured to STC*

Electrical Specification	Only front (STC)					
Peak power, Pmax(Wp)	**550**	**555**	**560**	**565**	**570**	**575**
Maximum voltage, Vmpp (V)	43.35	43.52	43.69	43.86	44.03	44.20
Maximum current, Impp (A)	12.69	12.75	12.82	12.88	12.95	13.01
Open circuit voltage, Voc (V)	51.00	51.20	51.40	51.60	51.80	52.00
Short circuit current, Isc (A)	13.36	13.43	13.49	13.56	13.63	13.70
Module efficiency (%)	21.31	21.50	21.70	21.89	22.08	22.28

*STC: Irradiance 1000 W/m², cell temperature 25°C, Air mass AM 1.5 according to EN 60904-3.Average efficiency reduction is approx. 3% at 200 W/m² according to EN 60904-1. Except Pmpp, all other parameter have tolerance of +/-3%, measurement uncertainty <3%.

Electrical Characteristics with different rear side power gain (Reference 560 Wp Front)

Electrical Specification	Pmax gain from rear side$^{\lambda}$				
Bifaciality Gain	10%	15%	20%	25%	30%
Peak power, (0 ~+ 4.99 Wp) Pmax(Wp)	616	644	672	700	728
Maximum voltage, Vmpp (V)	44.43	44.53	44.64	44.74	44.84
Maximum current, Impp (A)	13.87	14.47	15.07	15.67	16.27
Open circuit voltage, Voc (V)	51 .70	51.81	51.91	52.00	52.11
Short circuit current, Isc (A)	14.83	15.50	16.18	16.86	17.53
Module efficiency (%)	23.8	24.9	26.0	27.1	28.20

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

Packaging Configuration

Container	40'HC		
Pallets / Container	20	Pieces / Container	720

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.

Caution:
Please read safety and installation instructions before using the product.

Temperature co-efficients (Tc) and permissible operating conditions

T_c of open circuit voltage (ß)	-0.26% /°C
T_c of short circuit current (α)	0.046% /°C
T_c of power (Y)	-0.31% /°C
Maximum system voltage	1500 VDC (IEC & UL)
NOCT	45°C ± 2°C
Temperature range	-40°C to + 85°C

Mechanical data

Length	2278 mm
Width	1133 mm
Height	30 mm
Weight	28 kg
Junction box	IP68
Cable and connectors	300 mm length cable, MC4 compatible connectors
Application class	Class A (Safety class II)
Superstrate	High Transmission ARC glass 3.2 mm
Cells	N-type Bifacial 144 Half-cut cell
Encapsulation	High volume resistivity and low MVTR
Substrate	Transparent / Patterned Backsheet
Frame	Anodized Frame
Design Mechanical load	3600 Pa-downward; 1600 Pa-Upward
Safety Factor for Mechanical load	1.5
Maximum series fuse rating	30 A

#Warranty:
Please read Adani solar warranty documents thoroughly.

MSEL/MDL/PM/Gen-II/Rev04

Warranty and certifications

Product warranty# 12 years of product warranty
Performance warranty# Power degradation <1.0% in first year <0.40% / year in 2-30 years
Approvals and certificates†: IEC 61215, IEC 61730, UL 61730, BIS, IEC 61853-1,IEC 62782, IEC 61853-2, IEC 61701, IEC 60068-2-68, IEC 62716

†Few certifications are under process

EU-28 WEEE COMPLIANT

Recyclable packaging