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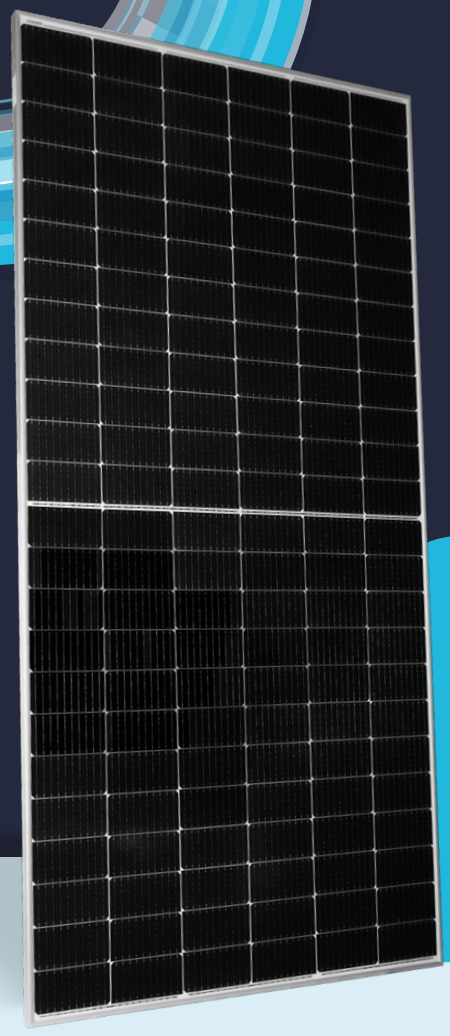


ETERNAL SHINE Series

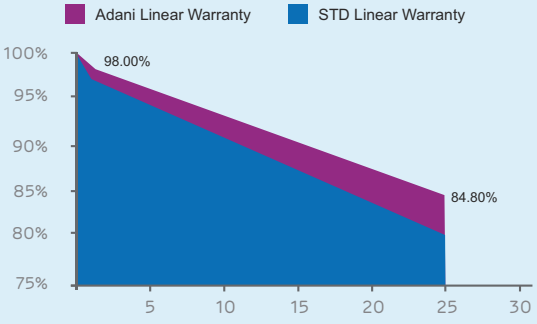
Monofacial PV Modules
MBB P-Type PERC Half-cut

ASM-M10-144-AAA (AAA=520-550)
144 Cells | 520-550 Wp| Gen-I

Highlights

- MBB cell technology with 10BB, smart soldering
- High module conversion efficiency upto 21.22%
- Excellent low light performance
- Least degradation for LID & LeTID with Ga Doped wafer technology
- Excellent anti-micro cracking performance with more balanced interior stress: grid pattern current path
- Excellent PID resistance

Warranty based on Power



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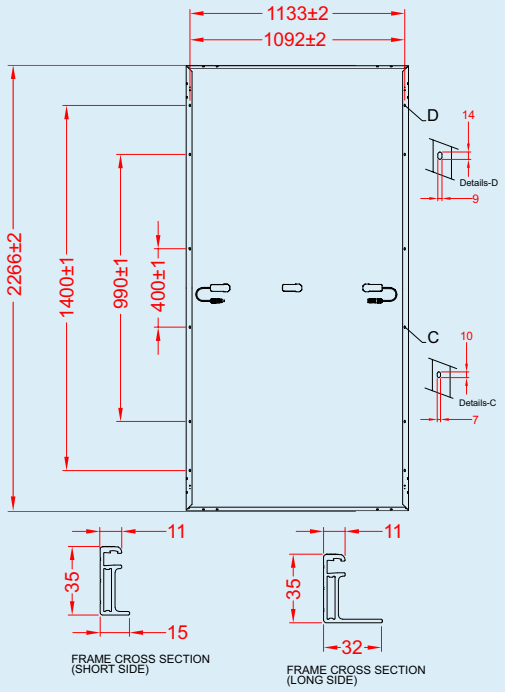
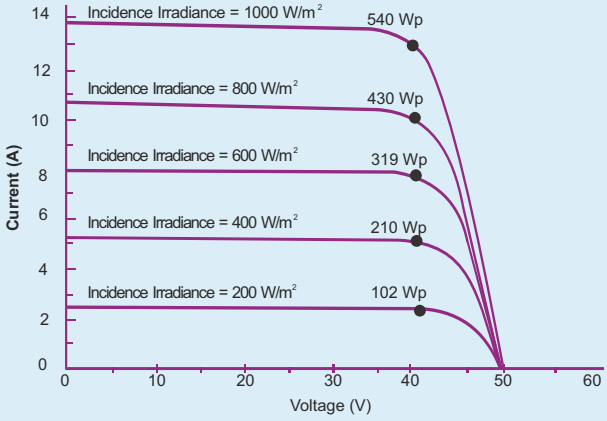
Dimensions in mm



Technical Data

Multi irradiance curve
Monofacial M10-144 HC Cell Module

Cell temp: 25°C



Electrical data - All data measured to STC*

Electrical Specification	Only front (STC)						
Peak power, (0 ~+ 4.99 Wp) Pmax(Wp)	520	525	530	535	540	545	550
Maximum voltage, Vmpp (V)	41.18	41.34	41.49	41.64	41.80	41.94	42.09
Maximum current, Impp (A)	12.65	12.72	12.79	12.86	12.93	13.01	13.07
Open circuit voltage, Voc (V)	48.60	48.78	48.95	49.12	49.32	49.48	49.67
Short circuit current, Isc (A)	13.41	13.48	13.55	13.63	13.71	13.79	13.85
Module efficiency (%)	20.25	20.44	20.64	20.83	21.03	21.22	21.42

*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. Expect Pmpp, all other parameter have tolerance of +/-3%, measurement uncertainty <3%.

Electrical Characteristics at NOCT**

Electrical Specification						
Pmax(Wp)-NOCT	390	393	397	401	405	408
Maximum voltage, Vmpp (V)	38.39	38.54	38.68	38.82	38.98	39.10
Maximum current, Impp (A)	10.16	10.22	10.27	10.33	10.38	10.46
Open circuit voltage, Voc (V)	45.43	45.76	45.92	46.09	46.28	46.42
Short circuit current, Isc (A)	10.90	10.96	11.02	11.08	11.13	11.22

**NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec
All parameter have a tolerance of +/-3 %, measurement uncertainty <3 %

Packaging Configuration

Container	40'HC		
Pallets / Container	20	Pieces / Container	620

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)	-0.28% /°C
T_c of short circuit current (α)	0.048% /°C
T_c of power (Y)	-0.37% /°C
Maximum system voltage	1500 V (IEC & UL)
NOCT	45°C ± 2°C
Temperature range	-40°C to + 85°C

Mechanical data

Length	2266 mm
Width	1133mm
Height	35 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 transmittance ARC glass 3.2 mm
Cells	144 Half-cut mono-crystalline P-type PERC solar cells; Multi bus bar
Encapsulation	High volume resistivity and low MVTR
Substrate	White Backsheet
Frame	Anodized Frame
Design Mechanical load	3600 Pa-downward; 1600 Pa-upward
Safety Factor for Mechanical load	1.5
Maximum series fuse rating	25 A

 # Warranty:
Please read Adani solar warranty documents thoroughly.

Warranty and certifications

Product warranty# 12 years of product warranty
Performance warranty# Power degradation <2.0% in first year and <0.55% / year in 2-25 years
Approvals and certificates†:
IEC 61215, IEC 61730, UL 61215, UL 61730, BIS, IEC 61853-1,IEC 62782,IEC 61701, IEC 61853-2 IEC 60068-2-68, IEC 62716

EU-28 WEEE COMPLIANT
Recyclable packaging

MSEL/MDL/PM/Gen-I/Rev04