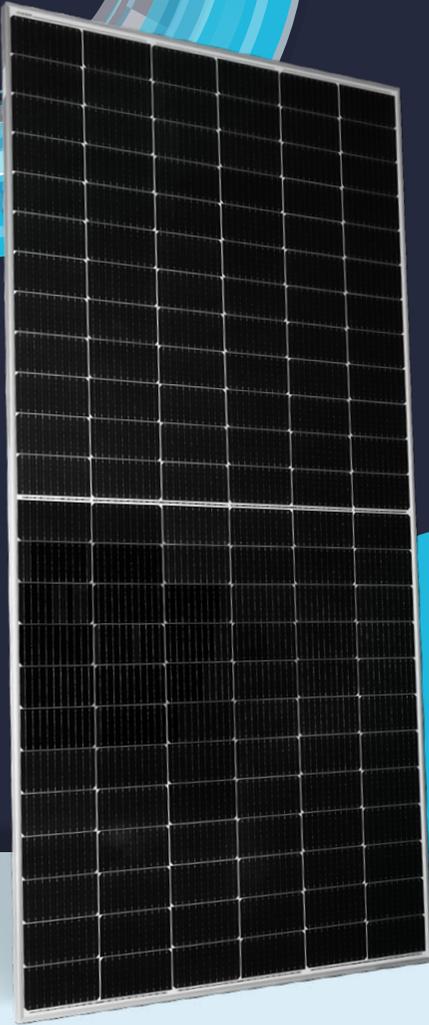


ETERNAL SHINE Series

Monofacial PV Modules
MBB P-Type PERC Half-cut

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



Highlights



MBB cell technology with
10BB, smart soldering



High modules
conversion efficiency
upto 21.12%



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

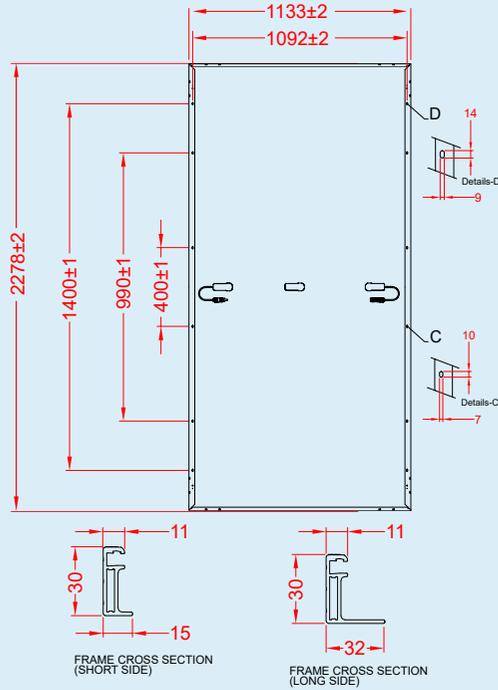


Excellent PID resistance

Warranty based on Power



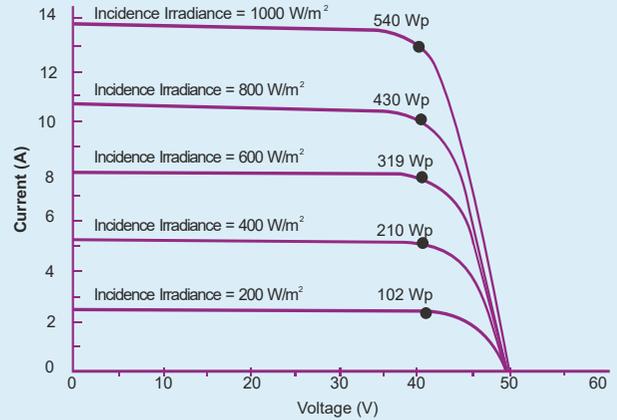
Dimensions in mm



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 (%) | 20.15 | 20.34 | 20.54 | 20.73 | 20.92 | 21.12 | 21.31 | |

*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 at NOCT**

| Electrical Specification | 390 | 393 | 397 | 401 | 405 | 408 |
|--------------------------------|-------|-------|-------|-------|-------|-------|
| Pmax(Wp)-NOCT | | | | | | |
| 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 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

| | |
|---------------------------------|-------------------|
| Tc of open circuit voltage (β) | -0.28% /°C |
| Tc of short circuit current (α) | 0.048% /°C |
| Tc of power (γ) | -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 | 2278 mm |
| Width | 1133mm |
| 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 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 |

Authorized distributor: Loop Solar

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 <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

