



# Mono-crystalline Silicon Solar PV Modules

ASM-7-PERC-AAA (AAA=335-350) | 72 Cells | 335-350 Wp

#### **Highlights**



7 % higher power output compared to industry average poly-crystalline module



Higher performance at longer wavelengths of light (1100-1200 nm)



Superior temperature co-efficient and performance at NOCT, PTC ratings



Excellent performance at low light irradiation (200W/m²)



LIR treated cells with least LID effect



PID. salt mist and Ammonia resistant



Triple EL checking to ensure defect free modules

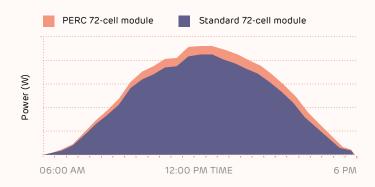
Reduces installation costs by 3%

Reduces transport costs by 3%

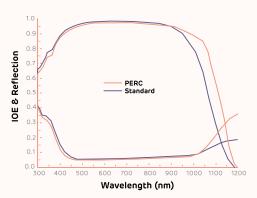
Reduces land costs by 3%

Reduces BOS costs by 3%

#### Higher generation due to PERC technology



#### Significant benefit of PERC technology



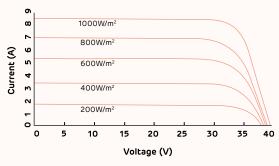
PERC technology enables better light capturing abilities at longer wavelength, weak and diffused light and in cloudy conditions.

Note: Data is based on the comparison of the Adani -72 cells mono-crystalline (345Wp) with industry's 325 Wp mono-crystalline module for a scale of 1 MW installation and will vary from site to site.



# **Technical Data**

#### Current-Voltage Curve

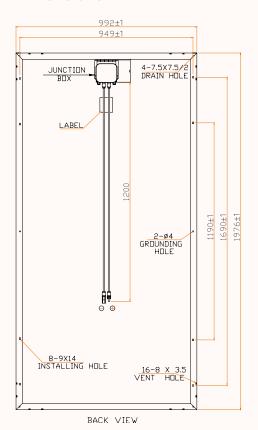


#### Electrical data - All data measured to STC\*

| Peak power, (0 ~+ 4.99 Wp)<br>Pmax(Wp) | 335   | 340   | 345   | 350   |
|--|-------|-------|-------|-------|
| Maximum voltage, Vmpp (V)              | 37.96 | 38.19 | 38.4  | 38.59 |
| Maximum current, Impp (A)              | 8.84  | 8.92  | 9     | 9.08  |
| Open circuit voltage, Voc (V)          | 46.69 | 46.88 | 47.08 | 47.26 |
| Short circuit current, Isc (A)         | 9.39  | 9.48  | 9.56  | 9.68  |
| Module efficiency (%)                  | 17.09 | 17.34 | 17.6  | 17.85 |

\*STC: Irradiance 1000 W/m², cell temperature 25°C, air mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m² according to EN 60904-1

#### Dimensions in mm



#### Warranty and certifications

#### Product warranty\*\*

25 years linear power warranty

#### Performance guarantee\*\*

Power degradation < - 2.5 % in first year < - 0.68 % / year in 2-25 years

**Approvals and certificates:** IEC 61215 Ed2, IEC 61730, IEC 61701, UL 1703, MCS, JET, CEC, CEC-Aus, IEC 62716, IEC 62759, IEC 62804

### Electrical parameters at NOCT

| Power(Wp) at NOCT  | 244.94 | 248.6 | 253.22 | 256.1 |
|--------------------|--------|-------|--------|-------|
| V@Pmax(V) at NOCT  | 34.79  | 35.08 | 35.33  | 35.61 |
| I@Pmax (A) at NOCT | 7.04   | 7.09  | 7.17   | 7.19  |
| Voc (V) at NOCT    | 42.98  | 43.19 | 43.4   | 43.64 |
| Isc (A) at NOCT    | 7.64   | 7.71  | 7.76   | 7.84  |

<sup>\*</sup>NOCT irradiance 800 W/m2, ambient temperature 20°C, wind speed 1 m/sec

# Temperature co-efficients (TC) and permissible operating conditions

| TC of open circuit voltage ( $\beta$ ) | -0.31% /°C        |
|--|-------------------|
| TC of short circuit current (α)        | 0.069 % /°C       |
| TC of power ( Y )                      | -0.42 % /°C       |
| Maximum system voltage                 | 1000 V (IEC & UL) |
| NOCT                                   | 44°C ± 2°C        |
| Temperature range                      | -40°C to + 85°C   |

#### Mechanical data

| Length                               | 1976 mm  |
|--------------------------------------|--|
| Width                                | 992 mm   |
| Height                               | 35 mm / 40 mm  |
| Weight                               | 22 Kg (35 mm) / 27 Kg (40mm)   |
| Junction box                         | IP67   |
| Cable and connectors                 | 1200 mm length cable, MC4 & Amphenol compatible connectors             |
| Application class                    | Class A (Safety class II)  |
| Superstrate                          | High transmittance arc glass   |
| Cells                                | 72 mono-crystalline solar cells ; 4 bus bars,<br>156.75 mm x 156.75 mm |
| Encapsulation                        | Low shrinkage PID resistant EVA  |
| Substrate                            | Back sheet   |
| Frame                                | Anodized aluminium frame with twin wall profile                        |
| Mechanical load test as per IEC & UL | 5400 Pa-front ; 2400 Pa-back   |
| Maximum series fuse rating           | 15 A   |

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#### \*Caution

Please read safety and installation instructions before using the product.

#### 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.