



# 5BB Multi-crystalline Solar PV Modules -1000V Series

ASP-7-AAA (AAA=300-330) | 72 Cells | 300-330 Wp

## Highlights



More power/m<sup>2</sup> compared to industry average



Higher specific energy yield (kwh/kwp) due to superior cell + module engineering



Superior performance at NOCT and PCT conditions



Superior low light irradiation performance 200w/m<sup>2</sup>



5BB modules offer better performance against micro-cracks compared to 4BB & 3BB modules



Triple EL checking to ensure defect free modules



Reduces installation costs by 2%

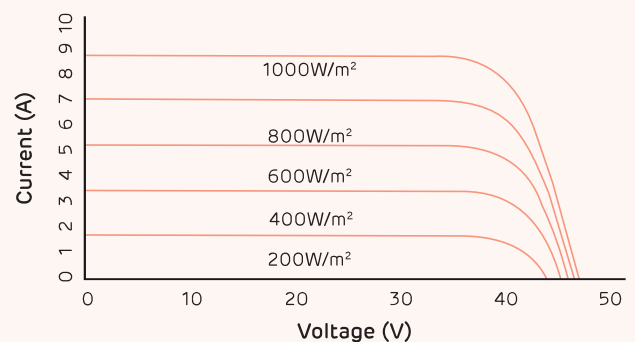
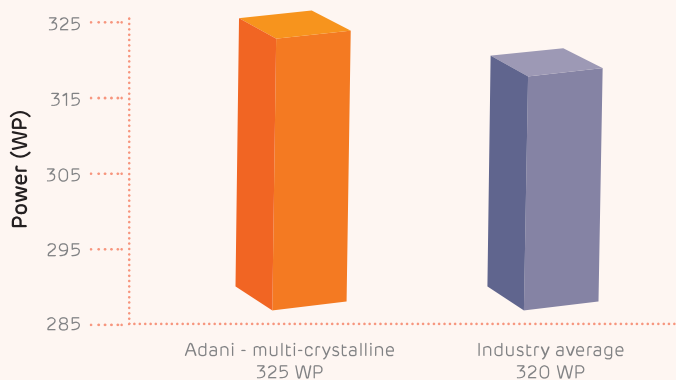
Reduces transport costs by 2%

Reduces land costs by 2%

Reduces BOS costs by 2%

## Significant advantages of Adani 5BB multi-crystalline module

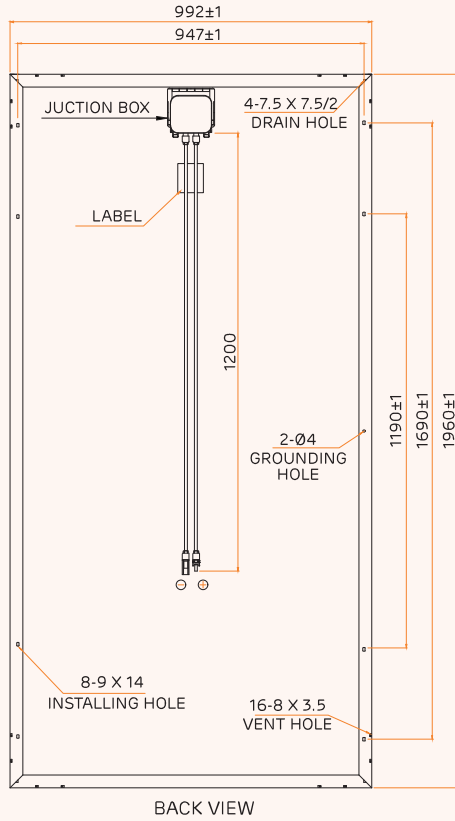
## Current-voltage curve



**Note:** Data is based on the comparison of the Adani -72 cells standard multi (325Wp) with industry's average of 320 Wp module for a scale of 1 MW installation and cost reduction will vary from site to site.

# Technical Data

## Dimensions in mm



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

|  |       |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|
| Peak power, (0 ~+ 4.99 Wp)<br>Pmax(Wp) | 300   | 305   | 310   | 315   | 320   | 325   | 330   |
| Maximum voltage, Vmpp (V)              | 35.11 | 35.55 | 35.99 | 36.42 | 36.85 | 37.29 | 37.71 |
| Maximum current, Imp (A)               | 8.55  | 8.58  | 8.61  | 8.65  | 8.68  | 8.72  | 8.75  |
| Open circuit voltage, Voc (V)          | 43.34 | 43.79 | 44.23 | 44.67 | 44.97 | 45.26 | 46.4  |
| Short circuit current, Isc (A)         | 9.06  | 9.09  | 9.12  | 9.15  | 9.18  | 9.21  | 9.24  |
| Module efficiency (%)                  | 15.43 | 15.69 | 15.94 | 16.20 | 16.46 | 16.72 | 16.97 |

\*STC: Irradiance 1000 W/m<sup>2</sup>, cell temperature 25°C, air mass AM1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m<sup>2</sup> according to EN 60904-1. Except Pmp, all other parameters have a tolerance of +/-3 %, measurement uncertainty <3 %

## Electrical parameters at NOCT

|             |       |       |       |       |       |       |       |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| Pmax @ NOCT | 217.9 | 223.1 | 227.5 | 232   | 238.4 | 242.5 | 246.8 |
| Vmpp @ NOCT | 34.86 | 35.02 | 35.27 | 35.31 | 35.37 | 35.25 | 35.41 |
| Imp @ NOCT  | 6.25  | 6.37  | 6.45  | 6.57  | 6.74  | 6.88  | 6.97  |
| Voc @ NOCT  | 41.78 | 41.99 | 42.42 | 42.31 | 42.67 | 42.77 | 42.92 |
| Isc @ NOCT  | 6.95  | 7.07  | 7.11  | 7.22  | 7.33  | 7.42  | 7.5   |

\*NOCT irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1 m/sec

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

|                                 |                   |
|---------------------------------|-------------------|
| TC of open circuit voltage (β)  | -0.31% /°C        |
| TC of short circuit current (α) | 0.069 % /°C       |
| TC of power (γ)                 | -0.40 % /°C       |
| Maximum system voltage          | 1000 V (IEC & UL) |
| NOCT                            | 45°C ± 2°C        |
| Temperature range               | -40°C to + 85°C   |

## Mechanical data

|                                      |  |
|--------------------------------------|--|
| Length                               | 1960 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 multi-crystalline solar cells; 5 bus bars, 156.75 x 156.75 mm |
| Cell encapsulation                   | Superior dielectric strength & PID resistant EVA                 |
| Substrate                            | Tri layer backsheet  |
| 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   |

## Packing information

|                     |       |
|---------------------|-------|
| Container           | 40'HC |
| Pallets / Container | 22    |
| Pieces / Container  | 660   |

## Warranty and certifications

### Product warranty\*\*

12 years of product 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 62782, IEC 60068-2-68, IEC 61853



### \*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. All modules sold will be as per MSPVL MQAP

### \*\* Warranty:

Please read Adani solar warranty documents thoroughly.