

# Mono-crystalline PERC Silicon Solar PV Modules



**ASM-6-PERC-AAA**  
**ASM-6-B-PERC-AAA** (Black frame, white backsheet)  
**ASM-6-AB-PERC-AAA** (Black frame, white backsheet)  
**60 Cells | 275-300 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/m<sup>2</sup>)



LIR treated cells with least LID effect



PID, salt mist and Ammonia resistant



Triple EL checking to ensure defect free modules



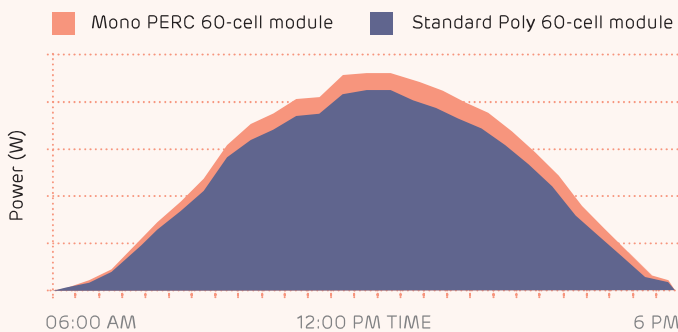
Reduces installation costs by 3%

Reduces transport costs by 3%

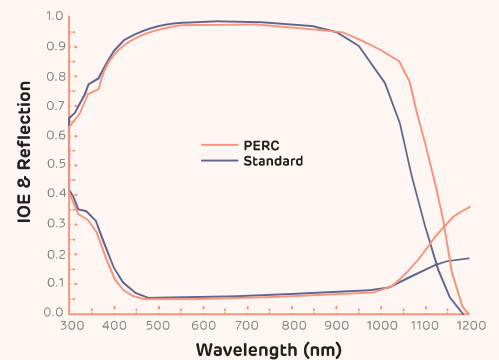
Reduces land costs by 3%

Reduces BOS costs by 3%

## Higher generation due to Mono PERC technology



## Significant benefit of PERC technology

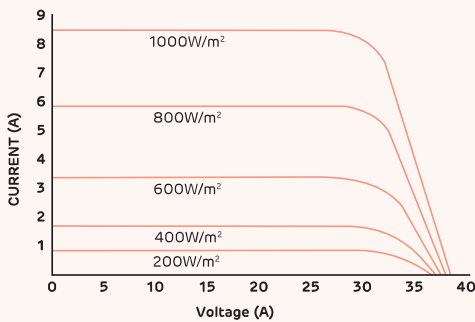


PERC technology enables better light capturing abilities at longer wavelength, weak and diffused light and in cloudy conditions.

**Note:** Data is based on the comparison of the Adani -60 cells mono modules (290Wp) with industry's 265 Wp poly 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) Pmax(Wp)	275	280	285	290	295	300
Maximum voltage, Vmpp (V)	31.59	31.80	31.91	32.20	32.40	32.55
Maximum current, Impp (A)	8.72	8.82	8.94	9.03	9.10	9.21
Open circuit voltage, Voc (V)	38.41	38.57	38.91	39.30	39.44	39.58
Short circuit current, Isc (A)	9.19	9.31	9.72	9.83	9.93	10.01
Module efficiency (%)	16.70	17.00	17.30	17.61	17.91	18.21

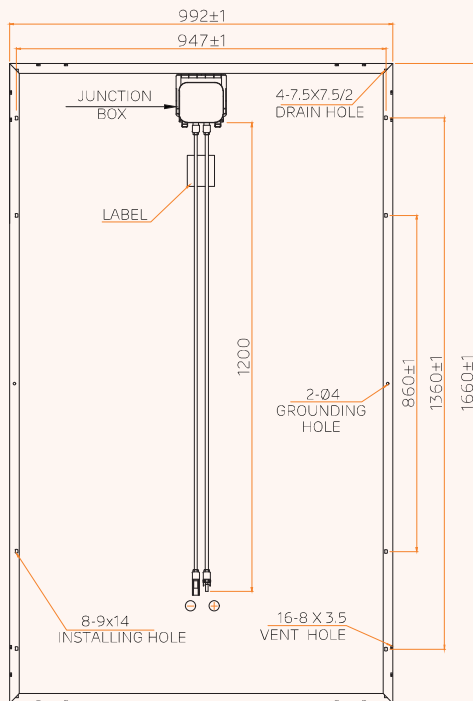
\*STC: Irradiance 1000 W/m<sup>2</sup>, cell temperature 25°C, air mass AM1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m<sup>2</sup> according to EN 60904-1. Except Pmpp, all other parameters have a tolerance of +/-3 %, measurement uncertainty <3 %

## Electrical parameters at NOCT

Power(Wp) at NOCT	202	206	208.5	212.7	215.4	218
V@Pmax(V) at NOCT	28.45	28.73	28.94	29.43	29.68	29.91
I@Pmax (A) at NOCT	7.10	7.17	7.20	7.23	7.26	7.29
Voc (V) at NOCT	35.80	36.00	36.20	36.40	36.60	36.80
Isc (A) at NOCT	7.56	7.58	7.60	7.62	7.66	7.70

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

## Dimensions in mm



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

TC of open circuit voltage ( $\beta$ )	-0.31% /°C
TC of short circuit current ( $\alpha$ )	0.068 % /°C
TC of power ( $\gamma$ )	-0.40 % /°C
Maximum system voltage	1000/1500 V (IEC & UL)
NOCT	44°C ± 2°C
Temperature range	-40°C to + 85°C

## Mechanical data

Length	1660 mm
Width	992 mm
Height	35 mm / 40 mm
Weight	17.5 Kg (35 mm) / 18.8 Kg (40mm)
Junction box	IP67, 14A junction box
Cable and connectors	1200 mm length cable, MC4 & Amphenol compatible connectors
Application class	Class A (Safety Class II)
Superstrate	High transmittance ARC glass
Cells	60 mono-crystalline PERC solar cells ; 5 bus bars, 156.75 x 156.75 mm
Encapsulation	Low shrinkage encapsulant
Substrate	Backsheet (Also available in black colour)#
Frame	Anodized aluminium frame with twin wall profile (Silver and black)
Mechanical load test as per IEC & UL	5400 Pa-front ; 2400 Pa-back
Maximum series fuse rating	15 A

## 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, 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.

**\*\* Warranty:**  
Please read Adani solar warranty documents thoroughly.