



# Mono-crystalline Solar PV Modules

VIP | 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

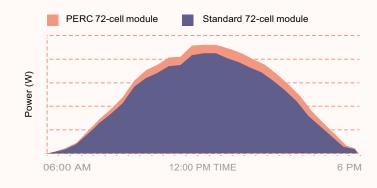
Reduces installation costs by 3%

Reduces transport costs by 3%

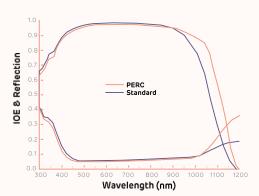
Reduces land costs by 3%

Reduces BOS costs by 3%

#### Higher generation due to PERC technology



#### significant benefit of PERC technology



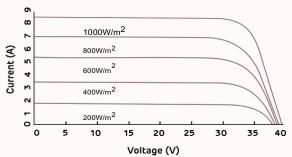
PERC technology enables better light capturing abilities at longer wavelength, weak and diffused light and in cloudy conditions.

Note: Data is based on the comparison of the Vipson -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.

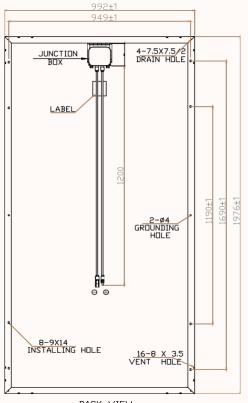


## **TechnicalData**

## Current-Voltage Curve



## Dimensions in mm



BACK VIEW

## 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

#### Certified for













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

Peak Power, ( 0 ~+ 4.99 Wp )	335	340	345	350
Pmax (Wp)				
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

### 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

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

TC of open circuit voltage <sup>β</sup>	-0.31% /°C
TC of short circuit current	0.069 % /°C
TC of power	₋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, 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
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 vour order.

#### **VIPSON SOLAR ENERGY PRIVATE LIMITED**

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