



# **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/m <sup>2</sup>)



LIR treated cells with least LID effect



PID, salt mist and Ammonia resistant

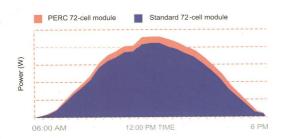
Reduces installation costs by 3%

Reduces transport costs by 3%

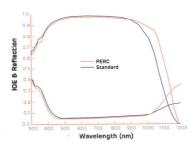
Reduces land costs by 3%

Reduces BOS costs by 3%

### Higher generation due to PERC technology



### significant benefit of PERC technology



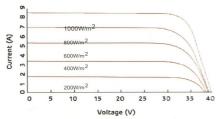
PERC technology enables better light capturing abilities at longer wavelength, weak and diffused light and in cloudy conditions.

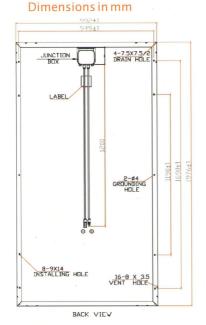
Note: Data is based on the comparison of the Vipson -72 cells mono-crystalline (345Wp) with industry's 325 Wp mono-crystalline module for a scale of 1 MW installation and will vary from site to site.



# **TechnicalData**

### Current-Voltage Curve





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

# Electrical data All data measured to STC\*

335	340	345	350	
37.96	38.19	38.4	38.59	
8.84	8.92	9	9.08	
46.69	46.88	47.08	47.26	
9.39	9.48	9.56	9.68	
17.09	17.34	17.6	17.85	
	37.96 8.84 46.69 9.39	37.96 38.19 8.84 8.92 46.69 46.88 9.39 9.48	37.96 38.19 38.4 8.84 8.92 9 46.69 46.88 47.08 9.39 9.48 9.56	37.96 38.19 38.4 38.59 8.84 8.92 9 9.08 46.69 46.88 47.08 47.26 9.39 9.48 9.56 9.68

\*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	-0.31% /°C	
TC of short circuit current a	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, 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

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