



VIRAJ 1500 V Series

VIRAJ PIL-72P-315-335 | POLYCRYSTALLINE SOLAR MODULES | 72 CELLS | 315 - 335 Wp

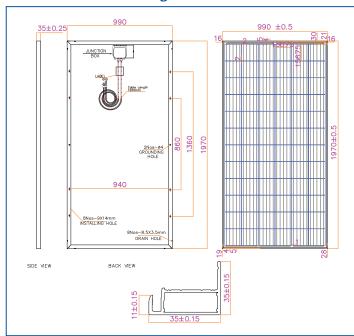


1500 V System Voltage

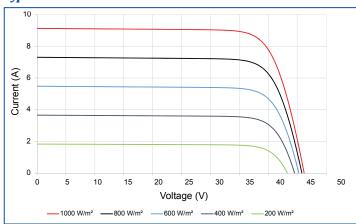
- Superior Module Efficiency
- PID Resistant with long term Reliability
- Glass with Anti-Reflective Coating
- Module binned by current to improve system performance
- Sustain Heavy Wind & Snow Loads
 (2400 Pa & 5400 Pa)
- Positive Power Tolerance (0 ~ +4.99 Wp)

DCR Modules Available

Module Dimensions Diagram



Typical I-V Curves



Average relative efficiency reduction of 5% at 200 W/m according to EN 60904-1.









Pennar Industries Limited

Pennar Industries Limited is one of the leading engineering organizations in India well known for its expertise in providing engineered products & services with our presence in more than 20 Countries across the Globe. An epitome of quality, precision, and perfection, Pennar is driven by an unrelenting desire to excel with experience spanning over three decades.

Product Specifications

Electrical Data [All Data refe	Electrical Data [All Data refers to STC (AM 1.5g, 1000 W/m², 25°C)]				Electrical Parameters at NOCT						
Peak Power Pmax (0 ~ +4.99 Wp)	315	320	325	330	335	Module Rating (Wp)	315	320	325	330	335
Maximum Voltage Vmpp (V)	37.50	37.70	37.80	38.00	38.10	Power (W)	233.20	237.20	240.60	244.70	248.20
Maximum Current Impp (A)	8.40	8.50	8.60	8.70	8.80	V @ Pmax (V)	34.60	34.80	34.90	35.00	35.10
Open Circuit Voltage Voc (V)	45.80	46.00	46.20	46.30	46.50	I @ Pmax (A)	6.74	6.82	6.90	6.99	7.06
Short Circuit Current Isc (A)	8.92	9.03	9.13	9.24	9.35	Voc (V)	42.20	42.60	42.80	42.89	43.08
Module Efficiency (%)	16.23	16.49	16.75	17.01	17.26	Isc (A)	7.22	7.31	7.39	7.47	7.56

STC:1000 W/m² Irradiance, 25°C Cell Temperature,

AM 1.5g Spectrum according to EN 60904-3

Average Relative Efficiency Reduction of 5% at 200 W/m² according to EN 60904-1

NOCT Irradiance 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/sec

Temperature Coefficients (Tc)[Permissible Operating Conditions]

Tc of Open Circuit Voltage [β]	-0.29% / °C			
Tc of Short Circuit Current [α]	0.057% / °C			
Tc of Power [γ]	-0.38% / °C			
Maximum System Voltage	1500 Volt			
NOCT	44 Degree Celsius (+/- 2°C)			
Temperature Range	-40°C to + 85°C			
Warranty & Certifications				
Product Warranty	15 Years			
Performance Warranty**	Linear Power Warranty for 27 Years with 2.5% for 1st Year Degradation & 0.67% from Year 2 to Year 27			
Approvals & Certificates	IS 14286* , IS/IEC 61730-1* , IS/IEC 61730-2*,DNV-GL ISO 9001:2015, TUV IATF 16949:2016 (1st Edition, 2016-10-01)			
(*) Certifications Under Progress				
(**) Refer to Pennar Industries Limited Warranty Document for Terms & Conditions				
Performance Warranty				

Performance Warranty

80.1% 80%

I 1 YEAR **Packaging Information**

Export Container Size: 40' HC	Pallets / Container: 24	Pieces / Container: 720
Domestic Truck Size: 32' (Multiaxel closed body)	Pallets / Truck: 16	Pieces / Truck: 480
Domestic Truck Size: 19' (Open body)	Pallets / Truck: 10	Pieces / Truck: 300

Mechanical Data

	Mechanical Data					
	Length x Width x Height	1970 x 990 x 35 mm. (77.56 x 38.97 x 1.38 inches)				
	Weight	21.00 Kg (46.30 lbs)				
	Junction Box	IP68, 3 Bypass Diodes				
	Cables & Connectors	1200 mm. (47.24 inches) length of cable, MC4 Compatible Connectors				
	Applocation Class	Class A (Safety Class II)				
	Superstrate / Glass	4.0 (0.157 inches) / 3.2 mm (0.13 inches) High transmittance low iron tempered glass AR Coat				
	Cells	Poly-Crystalline 5BB Anti PID Grade A of size 157 x 157 mm				
_	Cell Encapsulant	EVA (Ethylene Vinyl Acetate) Thickness 0.45 mm. +/- 5%				
	Backsheet	Non – Fluoro Type, UV Stable PET with thickness of 365 microns for 1500V				
	Frame	Anodized Aluminium Frame				
	Mechanical Load Test	5400 Pa (Snow Load), 2400 Pa (Wind Load)				
	Maximum Series Fuse Rating	20 A				

Address

Corporate Address: Pennar Industries Ltd. 9th Floor (West Wing) **DHFLVC Silicon Towers** Kondapur, Hyderabad Telangana – 500084 (INDIA) Factory Address: Pennar Industries Ltd. Sy No. 144 & 145, Chandpur Village Sadasivapet, Dist. Sangareddy Telangana – 502291 (INDIA)

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CAUTION: READ SAFETY AND INSTALLATION MANUAL BEFORE USING THE PRODUCT.

Specifications included in this datasheet are subject to change without notice. Electrical data without guarantee. Please confirm your exact requirement with the company representative while placing your ord

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27 YEAR





