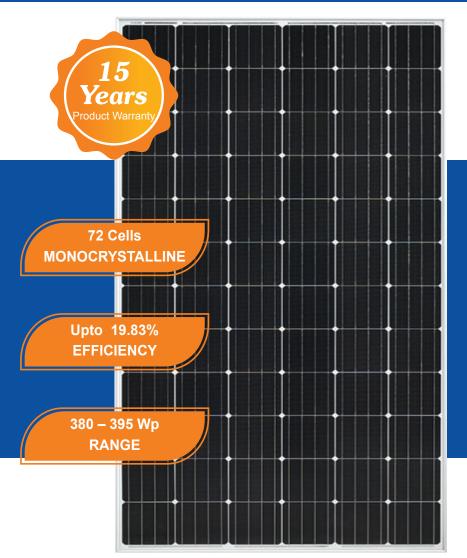




# ATULYA Grande 1500 V Series

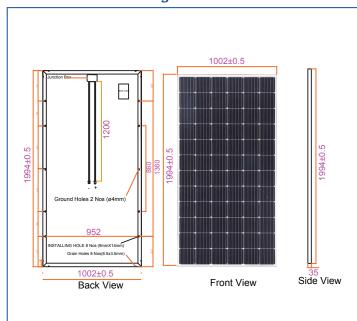
ATULYA Grande PIL-72M-380-395 | MONOCRYSTALLINE SOLAR MODULES | 72 CELLS | 380 – 395 Wp



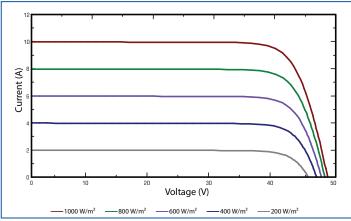
# 1500 V System Voltage

- More than 10% Higher Output than most of the Polycrystalline Modules
- Designed & Engineered to Provide Excellent
   Low Light and Longer Wavelength Response
- We Use Only Highly Effecient
   Passivated Emitter Rear Contact (PERC)
   Technology Cells
- Narrow Power Binning Tolerance
- Extremely Low Light Induced Degradation
- Sustain Heavy Wind & Snow Loads
   (2400 Pa & 5400 Pa)

### **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)	380	385	390	395	Module Rating (Wp)	380	385	390	395
Maximum Voltage Vmpp (V)	39.70	39.90	40.10	40.28	Power (W)	280.70	284.30	288.20	291.60
Maximum Current Impp (A)	9.58	9.65	9.73	9.81	V @ Pmax (V)	37.00	37.28	37.47	37.60
Open Circuit Voltage Voc (V)	48.45	48.65	48.85	49.05	I @ Pmax (A)	7.59	7.63	7.69	7.75
Short Circuit Current Isc (A)	9.90	9.95	10.03	10.12	Voc (V)	44.63	44.81	44.99	45.18
Module Efficiency (%)	19.08	19.33	19.58	19.83	Isc (A)	8.00	8.05	8.11	8.18

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. Power measurement uncertainty is within +/- 3%

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

#### **Temperature Coefficients (Tc) [Permissible Operating Conditions]**

temperature designations (16/12 eminerate operature)				
Tc of Open Circuit Voltage [β]	-0.27% / °C			
Tc of Short Circuit Current [α]	0.057% / °C			
Tc of Power [γ]	-0.37% / °C			
Maximum System Voltage	1500 Volt			
NOCT	46 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 3% 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** 



#### **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**

	Length x Width x Height	1994 x 1002 x 35 mm. (78.50 x 39.44 x 1.38 inches)		
	Weight	22.50 Kg (49.61 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	3.2 mm (0.13 inches) High transmittance low iron tempered glass AR Coat		
	Cells	Mono-Crystalline PERC 5BB Anti PID Grade A of size 158.75 x 158.75		
_	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		
	A 11			

#### 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 or

## Contact Details:

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