

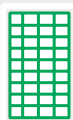
## ADITYA SERIES POLY

WS-290 to WS- 325 (72 Cells - 6")

## FEATURES



-  Superior Module Efficiency as per International Benchmarks
-  Positive Power Tolerance 0 /+ 5W
-  PID Resistant with long term reliability
-  Glass with Anti Reflective Coating  
Improves light transmission
-  Salt mist, Ammonia and Hail Resistant
-  Sustain Heavy Wind & Snow loads  
(2400 Pa & 7500 Pa)
-  IP 67 rated MC4 compatible connectors
-  Excellent Performance in low light
-  Sand and Dust Storm Resistant



**500 MW**

Module  
Manufacturing Capacity



Over 20 in house tests  
(DH: Damp heat test  
TC: Thermal cycling test  
HF: Humidity freeze test)

**25**

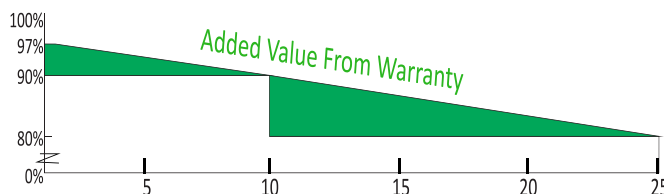
Years  
Output  
Warranty

**10 years Limited Product Warranty \*\***

**25 years Limited Power Output Warranty\*\*:**

-Minimum 90% at the end of 10 years

-Minimum 80% at the end of 25 years



## INTERNATIONAL & NATIONAL CERTIFICATIONS



ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007  
IEC 61215 | IEC 61730-1&2 | IEC 60068-2-68 | IEC 61701 | IEC 62716

[www.waaree.com](http://www.waaree.com)

### Electrical Characteristics\*

Model	WS-290 / 24V	WS-295 / 24V	WS-300 / 24V	WS-305 / 24V	WS-310 / 24V	WS-315 / 24V	WS-320 / 24V	WS-325 / 24V
Nominal Maximum Power, $P_m$ (W)*	290	295	300	305	310	315	320	325
Power tolerance	0 / + 5 W							
Open Circuit Voltage, $V_{oc}$ (V)*	44.80	44.90	45.00	45.10	45.20	45.25	45.30	45.35
Short Circuit Current, $I_{sc}$ (A)*	8.63	8.77	8.89	9.02	9.14	9.29	9.42	9.55
Voltage at Maximum Power, $V_{mp}$ (V)*	36.30	36.40	36.50	36.60	36.70	36.75	36.80	36.85
Current at Maximum Power, $I_{mp}$ (A)*	7.99	8.11	8.22	8.34	8.45	8.58	8.70	8.82
Maximum System Voltage (V)	1000							
Module Efficiency (%)*	14.94	15.20	15.46	15.72	15.98	16.23	16.49	16.74
Maximum Series Fuse Rating (A)	15	15	15	15	15	15	15	15
Limiting Reverse Current (A)	15	15	15	15	15	15	15	15

\*Under Standard Test Conditions (STC) of 1000 W/m<sup>2</sup> irradiance, AM 1.5 spectrum and 25°C cell temperature.

### Mechanical Characteristics

Length x Width x Thickness (L x W x T) - mm	1960 x 990 x 42
Mounting Holes Pitch (Y) - mm	1060
Mounting Holes Pitch (X) - mm	942
Weight (kg)	22.5
Solar Cells per Module (Units) / Arrangement	72 / 12 x 6
Solar Cell Type	Poly crystalline Silicon
Front Cover (Material / Thickness)	Tempered & Low Iron Glass, 3.2 mm
Encapsulate	Ethylene Vinyl Acetate
Frame Material	Anodized Aluminum Alloy
Junction Box (Protection degree / Material)	IP 65 or IP 67 rated / Weatherproof PPO enclosure with 3 bypass diodes
Connector	MC4 compatible or MC4, IP67 rated
Cable	4 sq. mm cross section, 1200 mm long
Fire safety class	C
Safety application class	A
Safety class	II
** "/ xxV" in model indicates the voltage rating of applicable battery	

### Thermal Characteristics

Temperature coefficient of Current ( $I_{sc}$ ), $\alpha$ (%/°C)	0.0681
Temperature coefficient of Voltage ( $V_{oc}$ ), $\beta$ (%/°C)	-0.2941
Temperature coefficient of Power ( $P_m$ ), $\gamma$ (%/°C)	-0.3845
NOCT (°C)	46 ± 2
Operating temperature range (°C)	-40 to 85

### Packaging Configuration

No. of modules per 40' HC container	636 pcs
No. of modules per 20' container	288 pcs

#### About WAAREE

WAAREE is one of India's leading multi-technology companies, headquartered in Mumbai. Founded in 1989, the company has transformed itself from a single business to a multi-technology organization, diversifying into exciting areas of Solar Energy, Industrial Valves, Petroleum Equipment's and Process control instrumentation. WAAREE has a presence in over 68 countries. It has more than 105 global channel partners, 26 sales offices in India and a huge list of satisfied customers over the years. Waaree is committed to supply best quality products & technology to its customers. WAAREE's products are manufactured at its state-of-the-art manufacturing facilities and is committed to excel in providing the society with world class quality products.

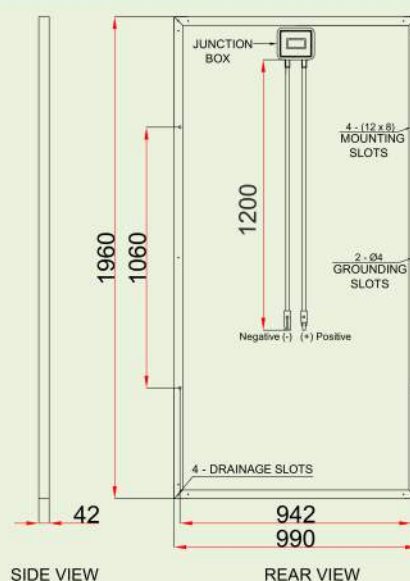
Contact: **WAAREE ENERGIES LTD.**

602, Western Edge 1, Opp Western Express Highway, Borivali (east), Mumbai- 400 066, Maharashtra, India  
Tel: +91 22 66 44 44 44 Fax: +91 22 66 44 44 00 Email: waaree@waaree.com

\*\* Refer to Waaree's Warranty document for Terms and Conditions

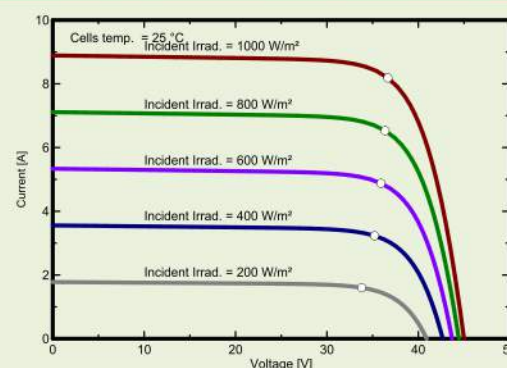
\*The Specifications are for reference purpose only. Waaree reserves the right to change the specifications without prior notice

### Design Specifications



SIDE VIEW REAR VIEW  
All Dimensions are in mm

### I-V Curve Variation with Irradiance



### I-V Curve Variation with Temperature

