## **ADITYA SERIES**

# WS-320 to WS-350 (72 Cells)





Superior module efficiency as per international benchmarks



1500 VDC system voltage for lower BoS cost



Glass with anti reflective coating improves light transmission



Salt mist, blowing sand and hail resistant



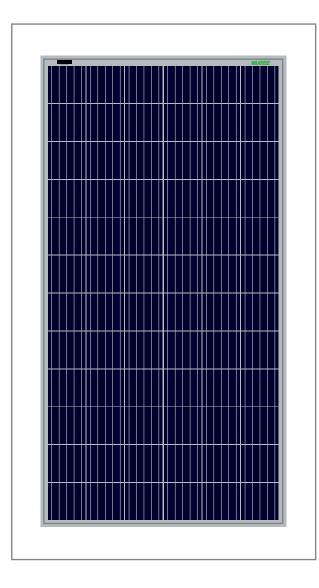
PID resistant with long term reliability



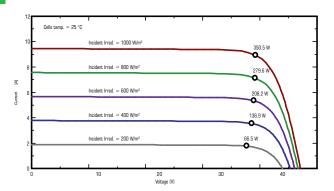
Sustain heavy wind & snow loads (2400 pa & 5400 pa)



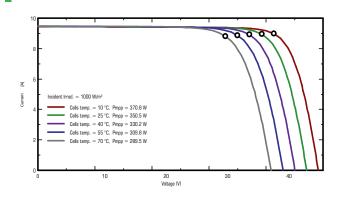
Modules binned by current to improve system performance



# I-V VARIATION WITH IRRADIANCE



# -V VARIATION WITH TEMPERATURE



The Graphs are for reference purpose only. Please consult Waaree technical team for further clarifications.

#### **INTERNATIONAL** & NATIONAL CERTIFICATIONS

IEC 61215:2016 | IEC 61730 1&2:2016 | IEC 61215 ed2 | IEC 61853 | IEC 62782 IEC 61701 | IEC.TS 62804-1 | IEC 62716 | IEC 60068-2-68 | UL 61730 | IS 14286













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### **ELECTRICAL CHARACTERISTICS**

Models	Pmax (W)		Vmp (V)		Imp (A)		Isc (A)		Voc (V)		Module Eff. (%)
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	iviouule EII. (90)
WS-320	320	235.19	37.65	34.59	8.50	6.80	9.15	7.33	46.50	43.18	16.49
WS-325	325	238.80	37.80	34.86	8.60	6.85	9.20	7.37	46.60	43.26	16.75
WS-330	330	242.42	37.95	35.03	8.70	6.92	9.25	7.42	46.70	43.26	17.01
WS-335	335	246.12	38.10	35.28	8.80	6.98	9.30	7.47	46.80	43.34	17.26
WS-340	340	249.07	38.25	35.53	8.90	7.01	9.35	7.51	46.90	43.39	17.52
WS-345	345	252.50	38.55	35.72	8.95	7.07	9.40	7.55	47.00	43.47	17.78
WS-350	350	256.70	38.90	36.02	9.00	7.12	9.45	7.57	47.10	43.66	18.04

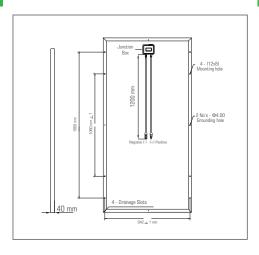
<sup>\*</sup>Standard Test Conditions (STC) - 1000 W/m2 irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature (NOCT) - 800 W/m2 irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1 m/s. Average power reduction of 4.5% at 200 W/m2 as per IEC 60904-1. Measuring Uncertainty ± 3%.

System Voltage	1500 V	Series Fuse Rating	16 A

#### **MECHANICAL CHARACTERISTICS**

Length x Width x Thickness (L x W x T)	1960 mm (L) x 990 mm (W) x 40 mm (T)
Weight	22.5 kgs
Solar Cells per Module (Units) / Arrangement	72 / (12x6)
Solar Cell Type & Size	Poly crystalline Silicon, 157 x 157 mm
Front Glass	3.2 mm Low Iron and Tempered glass with ARC coating
Encapsulate	PID Free & UV Resistant
Junction Box (Protection degree / Material)	IP68 / Weatherproof PPO
Connector (Protection degree / Type)	IP68 rated / MC4 compatible
Cable Cross - Section & Length	4 mm² & 1200mm

#### **DESIGN** SPECIFICATIONS



## **THERMAL CHARACTERISTICS**

Temperature coefficient of Current (Isc), $\alpha$ (%/°C)	0.051
Temperature coefficient of Voltage (Voc), ß (%/°C)	-0.2775
Temperature coefficient of Power (Pm), γ (%/°C)	-0.3859
NOCT (°C)	46 <u>+</u> 2
Operating temperature range (°C)	-40 to 85

Waaree Energies Ltd. is amongst the top Solar Energy Companies and has the country's largest Solar PV Module manufacturing capacity of 2 GW. In addition, it is committed to provide top notch EPC services, project development, rooftop solutions, solar water pumps and also in an Independent Power Producer. Waaree has its presence in over 325 + 100 locations nationally and 68 countries globally.

10 Years Product Warranty\* • 25 Years Power Output Warranty\*\*

Minimum 90% at the end of 10 years • Minimum 80% at the end of 25 years

\*If you need specific product certificates, and if module installations are to deviate from our guidance specified in our installation manual, please contact your local Waaree sales and technical representatives.

- The electrical data given here is for reference purpose only.
- $\bullet \ \ {\sf Please \ confirm \ your \ exact \ requirements \ with \ the \ sales \ representative \ while \ placing \ your \ order.}$
- Refer installation Manual instructions & Waaree warranty statement for terms & conditions.
- Waaree Reserves the right to change the specifications without prior notice.

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