# **ARKA SERIES**

# WSM-315 to WSM-330





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



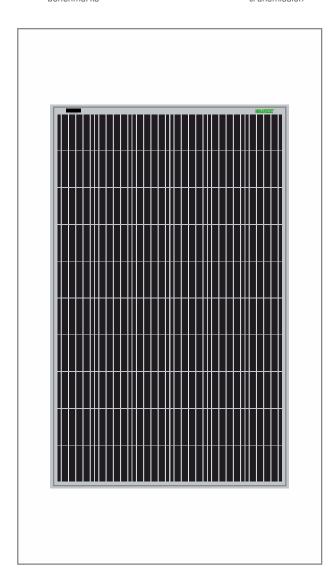
PID resistant with long term reliability



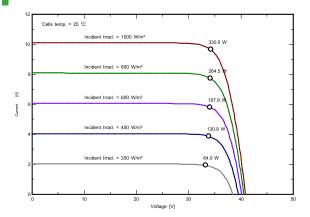
Sustain heavy wind & snow loads (2400 pa & 5400 pa)



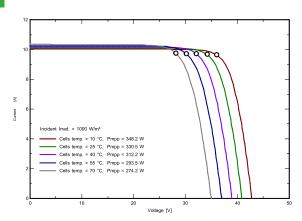
Modules binned by current to improve system performance



### I-V VARIATION WITH IRRADIANCE



#### I-V VARIATION WITH TEMPERATURE



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

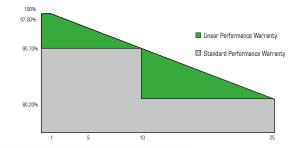
# INTERNATIONAL & NATIONAL CERTIFICATIONS ^

IEC 61215 | IEC 61730 | UL61730 IEC TS 62804-1









ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018 Independent assessment of factories by BLACK & VEATCH

# **ARKA SERIES**

WSM-315 to WSM-330



#### **ELECTRICAL CHARACTERISTICS**

Models	Pmax (W)		Vmp (V)		Imp (A)		lsc (A)		Voc (V)		Module Eff. (%)
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	iviouule EII. (90)
WSM-315	315	232.7	32.90	30.69	9.58	7.59	9.90	8.00	40.38	37.23	18.92
WSM-320	320	236.7	33.25	31.00	9.64	7.63	9.95	8.04	40.54	37.36	19.24
WSM-325	325	240.1	33.42	31.21	9.73	7.69	10.03	8.11	40.71	37.50	19.52
WSM-330	330	243.6	33.61	31.37	9.82	7.77	10.12	8.18	40.88	37.66	19.81

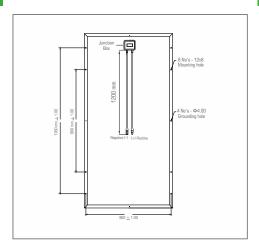
<sup>\*</sup>Standard Test Conditions (STC) - 1000 W/m2 irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature (NOCT) - 800 W/m2 irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1 m/s. Average power reduction of 4.5% at 200 W/m2 as per IEC 60904-1. Measuring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

System Voltage 1500 V	Series Fuse Rating	16 A
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#### **MECHANICAL CHARACTERISTICS**

Length x Width x Thickness (L x W x T)	1660 mm (L) x 1003 mm (W) x 40 mm (T)
Weight	19 kgs
Solar Cells per Module (Units) / Arrangement	60 / (10x6)
Solar Cell	Mono PERC
Front Glass	3.2 mm Low Iron and Tempered glass with ARC coating
Encapsulate	PID Free & UV Resistant
Junction Box (Protection degree / Material)	IP67/IP68 rated / Weatherproof PP0
Connector (Protection degree / Type)	IP68 rated / MC4 compatible
Cable Cross - Section & Length	4 mm² & 1200mm
Frame	Anodized Aluminium Alloy

#### **DESIGN** SPECIFICATIONS



# THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), α (%/°C)	0.05
Temperature coefficient of Voltage (Voc), ß (%/°C)	-0.27
Temperature coefficient of Power (Pm), $\gamma$ (%/°C)	-0.37
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.

( ^ ) FEW MODELS MAY BE UNDER CERTIFICATION

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

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