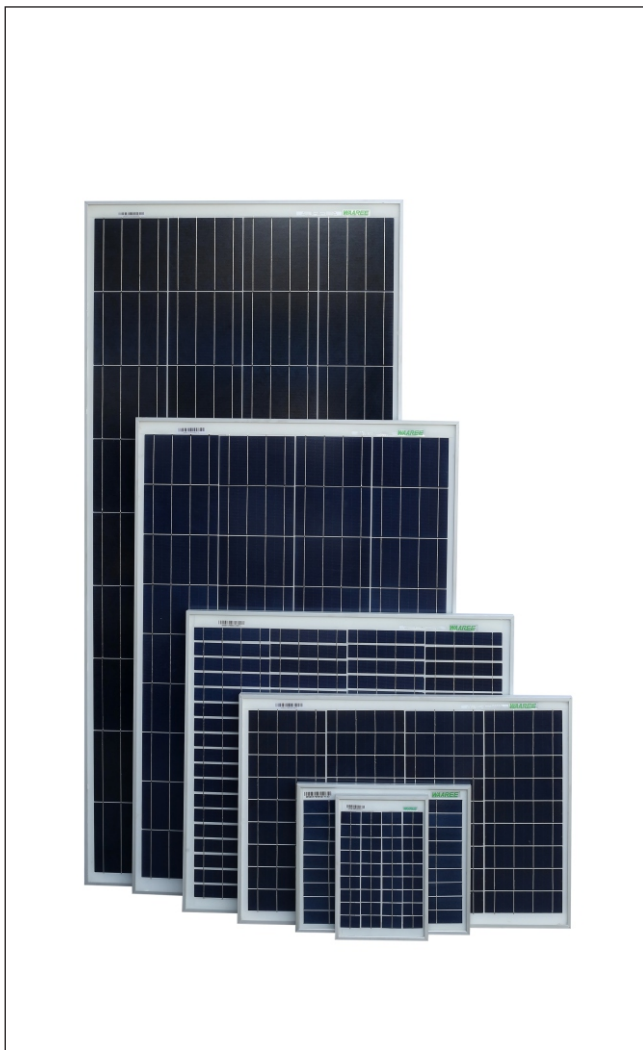
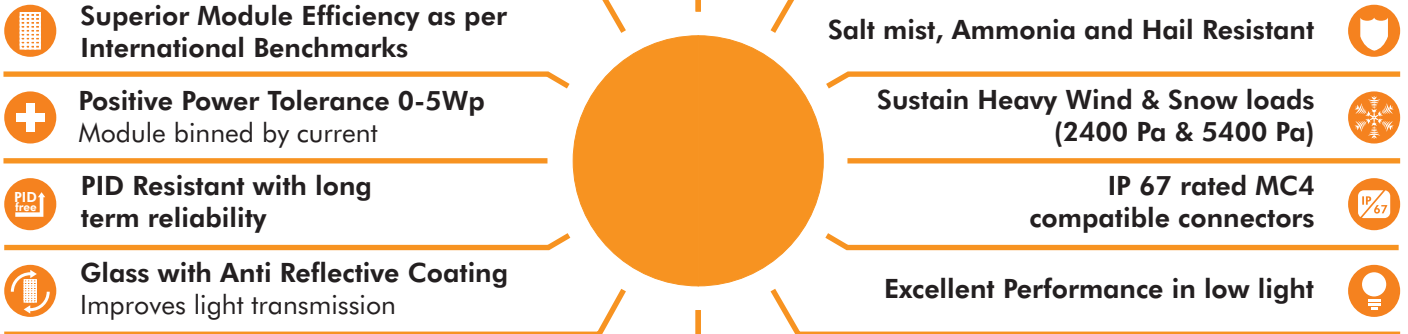


WS-40 to WS-90

ARKA SERIES

WAAREE®

One with the Sun



THERMAL CHARACTERISTICS

Temperature coefficient of Current/°C	0.0154
Temperature coefficient of Voltage/°C	-0.2775
Temperature coefficient of Power/°C	-0.3859
NOCT	46° ± 2°
Operating Temperature Range	-40° to 85°

WARRANTY

-5 years Limited Product Warranty**
-25 years Limited Power Output Warranty** <ul style="list-style-type: none">Minimum 90% at the end of 10 yearsMinimum 80% at the end of 25 years

INTERNATIONAL & NATIONAL CERTIFICATIONS



IEC 62804 | UI1703 | ROHS Compliance | REACH Compliance | INMETRO* | FIDE*

ISO 9001:2015 | ISO 14001:2004 | OHSAS 18001:2007 | IEC 61215
IEC 61730-1&2 | IEC 61701 | IEC 62716 | IEC 60068-2-68

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WS-40 to WS-90

ARKA SERIES



One with the Sun

ELECTRICAL CHARACTERISTICS

Model	WS-40	WS-45	WS-50	WS-50	WS-55	WS-60	WS-60	WS-65	WS-70	WS-74	WS-74	WS-75	WS-75	WS-80	WS-80	WS-85	WS-90	WS-90	WS-95
	/ 12V	/ 12V	/ 12V	/ 24V	/ 12V	/ 12V	/ 24V	/ 12V	/ 12V	/ 12V	/ 24V	/ 12V	/ 24V	/ 12V	/ 24V	/ 12V	/ 24V	/ 12V	/ 12V
Nominal Maximum Power, Pm (W)*	40	45	50	50	55	60	60	65	70	74	74	75	75	80	80	85	90	90	95
Positive Tolerance Only																			
Power Tolerance																			
Open Circuit Voltage, Voc (V)*	21.37	21.42	21.47	43.60	21.52	21.57	43.70	21.62	21.67	21.71	43.80	21.72	43.85	21.77	43.90	21.82	21.87	43.95	21.92
Short Circuit Current, Isc (A)*	2.50	2.80	3.11	1.53	3.41	3.71	1.83	4.01	4.31	4.54	2.25	4.60	2.28	4.90	2.43	5.19	5.49	2.73	5.78
Voltage at Maximum Power, Vmp (V)*	17.18	17.185	17.21	35.15	17.235	17.26	35.25	17.285	17.31	17.33	35.35	17.335	35.4	17.36	35.45	17.385	17.41	35.5	17.435
Current at Maximum Power, Imp (A)*	2.33	2.62	2.91	1.43	3.2	3.48	1.71	3.77	4.05	4.28	2.10	4.33	2.12	4.61	2.26	4.89	5.17	2.54	5.45
Maximum System Voltage (V)	1000																		
Module Efficiency (%)	12.22%	10.58%	11.76%	12.93%	12.93%	14.11%	14.11%	13.01%	12.49%	12.18%	12.18%	12.35%	12.35%	13.17%	13.17%	13.69%	14.49%	14.49%	13.60%
Maximum Series Fuse Rating (A)	10	10	10	10	10	10	15	15	15	15	15	15	15	15	10	10	10	10	10
Limiting Reverse Current (A)	10																		
Rated Voltage (V dc)	17.18	17.19	17.21	35.15	17.24	17.26	35.25	17.29	17.31	17.33	35.35	17.34	35.40	17.36	35.45	17.39	17.41	35.50	17.44
Rated Current (A dc)	2.33	2.62	2.91	1.42	3.19	3.48	1.70	3.76	4.04	4.27	2.09	4.33	2.12	4.61	2.26	4.89	5.17	2.54	5.45

MECHANICAL CHARACTERISTICS

Model	WS-40	WS-45	WS-50	WS-50	WS-55	WS-60	WS-60	WS-65	WS-70	WS-74	WS-74	WS-75	WS-75	WS-80	WS-80	WS-85	WS-90	WS-90	WS-95
Length x Width x Thickness (LxWxT) - mm	485x 675x 35	630x 675x 35	630x 675x 35	630x 675x 35	630x 675x 35	630x 675x 35	630x 675x 35	700x 675x 35	830x 675x 35	900x 675x 35	900x 675x 35	900x 675x 35	900x 675x 35	920x 675x 35	920x 675x 35	920x 675x 35	920x 675x 35	920x 675x 35	1035x 675x 35
Mounting holes pitch (Y) -mm	245	310	310	310	310	310	310	360	410	450	450	450	450	450	450	450	450	450	545
Mounting holes pitch (X) -mm	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633
Weight (kg)	4.8	5.15	5.15	5.15	5.15	6	6	6	6	6.95	7.95	7.95	7.95	8.3	8.3	8.3	9	9	9
Cells per module (Units)/ Arrangement	36 / (9 x 4)																		
Cell Type	Polycrystalline Silicon																		
Front Cover (Material/ Thickness)	Tempered & Low Iron Glass, 3.2 / 4.0 mm																		
Encapsulate	Ethylene Vinyl Acetate																		
Frame Material	Anodized Aluminium Alloy																		
Junction Box (Protection degree/ Material)	Ip65 rated/ Weatherproof PPO enclosure with bypass diodes																		
Connector	Optional																		
Cable	Optional																		
Fire Safety Class	C																		
Application Class	A																		
Safety Class	II																		

* Mentioned electrical data are reference values which was derived at STC condition - Temp: 25°, Irradiance: 1000W/m2 and Am: 1.5Am with cleaned modules

**Refer To Waaree's Warranty Document For Terms & Conditions
 *The Specifications Are For The References Purpose Only.
 Waaree Reserves The Right To Change The Specifications Without Prior Notice.