ELITE SERIES
N-TYPE

BiN-08-565 to BiN-08-600
Framed Dual Glass Bifacial module

WAAREE® SOLAR AMERICAS INC

Highest reliability & enhanced crack tolerance MBB module

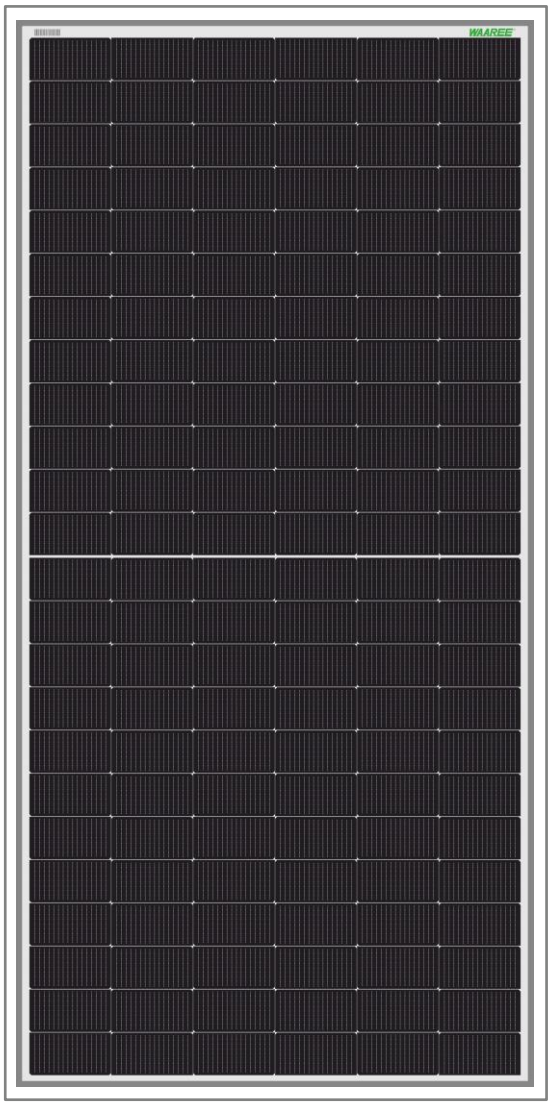
Sustain heavy snow & wind loads (5400 Pa & 2400 Pa)

Best in class thermal coefficients

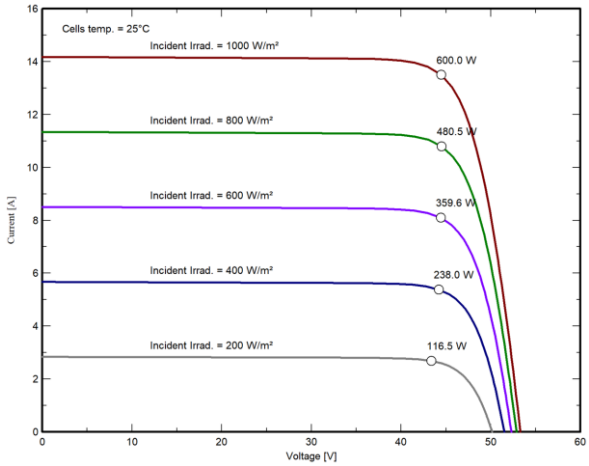
Highest commercial gains, lower LCOE

Better weak light performance

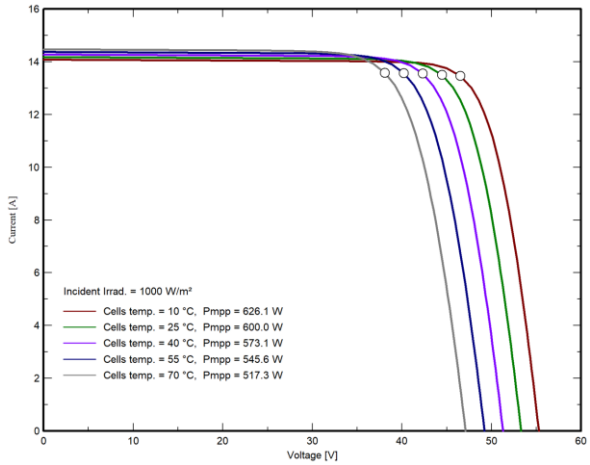
Excellent PID resistance



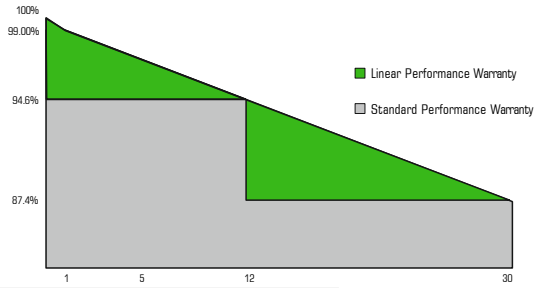
I-V VARIATION WITH IRRADIANCE



I-V VARIATION WITH TEMPERATURE



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



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

ELITE SERIES
N-TYPE

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Framed Dual Glass Bifacial module

WAAREE SOLAR AMERICAS INC

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	
BiN-08-565	565	426.60	43.56	40.60	12.97	10.48	13.75	11.10	51.90	49.31	21.87
BiN-08-570	570	430.40	43.71	40.74	13.04	10.54	13.81	11.14	52.10	49.50	22.07
BiN-08-575	575	434.10	43.86	40.88	13.11	10.59	13.87	11.19	52.30	49.69	22.26
BiN-08-580	580	437.90	44.01	41.01	13.18	10.65	13.93	11.24	52.50	49.88	22.45
BiN-08-585	585	441.70	44.15	41.15	13.25	10.71	13.99	11.29	52.70	50.07	22.65
BiN-08-590	590	445.50	44.29	41.28	13.32	10.76	14.05	11.34	52.90	50.26	22.84
BiN-08-595	595	449.20	44.44	41.41	13.39	10.82	14.11	11.39	53.10	50.45	23.03
BiN-08-600	600	453.00	44.61	41.65	13.45	10.88	14.17	11.44	53.30	50.64	23.23

*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

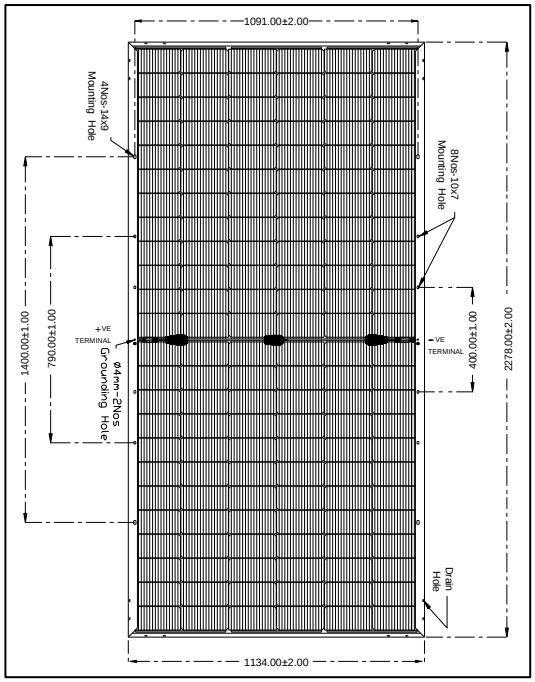
Series Fuse Ratting	30 A

BI-FACIAL OUTPUT - BACKSIDE POWER GAIN*

		BiN-08-565	BiN-08-570	BiN-08-575	BiN-08-580	BiN-08-585	BiN-08-590	BiN-08-595	BiN-08-600
15%	Power Output (W)	650	656	661	667	673	679	684	690
	Module Efficiency (%)	25.15%	25.38	25.60	25.82	26.05	26.27	26.48	26.71
20%	Power Output (W)	678	684	690	696	702	708	714	720
	Module Efficiency (%)	26.24%	26.48	26.71	26.94	27.18	27.41	27.64	27.88
25%	Power Output (W)	706	713	719	725	731	738	744	750
	Module Efficiency (%)	27.34%	27.5	27.83	28.06	28.31	28.55	28.79	29.04
30%	Power Output (W)	735	741	748	754	761	767	774	780
	Module Efficiency (%)	28.43	28.69	28.94	29.19	29.45	29.69	29.94	30.20

*The bifacial gains are dependant on the power plant design and location

DESIGN SPECIFICATIONS



THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), α (%/°C)	0.046
Temperature coefficient of Voltage (Voc), ß (%/°C)	-0.26
Temperature coefficient of Power (Pm), γ (%/°C)	-0.30
NOCT (°C)	43 ± 2
Operating temperature range (°C)	-40 to 85
Bifaciality Factor (%)	80 ± 10

MECHANICAL CHARACTERISTICS

Length x Width x Thickness (L x W x T)	2278 mm (L) x 1134 mm (W) x 33 mm (T)
Weight	32.5 kgs
Solar Cells per Module (Units) / Arrangement	144 cells / (12x6 ||12x6)
Solar Cell Type & Size	M10/M10R N-type Bifacial
Front Glass (Material / Thickness)	2 mm Low Iron HTAR semi-tempered glass
Back Glass (Material / Thickness)	2 mm Low Iron Printed semi-tempered glass
Encapsulate	PID free & UV Resistant
Junction Box (Protection degree / Material)	IP68 / Weatherproof PPO
Cable & Connector (Protection degree / Type)	IP68 rated / MC4 compatible
Cable cross - section & Length	4 mm² & 500mm
Frame	Anodized Aluminium Alloy

Waaree Solar Americas Inc. is the flagship company of the Waaree Group. Waaree Energies Limited stands as one of the largest vertically integrated new energy company globally and is headquartered in Mumbai, India. Waaree Solar Americas Inc. has solar PV module manufacturing capacity of 3 GW in America. In addition, Waaree is committed to provide top notch EPC services, project development, rooftop solutions etc. Waaree has its presence in over 350+ locations nationally and 68 countries globally.

12 Years Product Warranty • 30 Years Power Output Warranty

- The electrical data given here is for reference purpose only.
- 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.