

ELITE SERIES

N-TYPE

BiN-08-560 to BiN-08-600

Framed Dual Glass Bifacial module

WAAREE[®]

One with the Sun



Highest reliability & enhanced crack tolerance MBB module



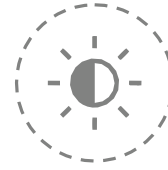
Sustain heavy snow & wind loads (5400 Pa & 2400 Pa)



Best in class thermal coefficients



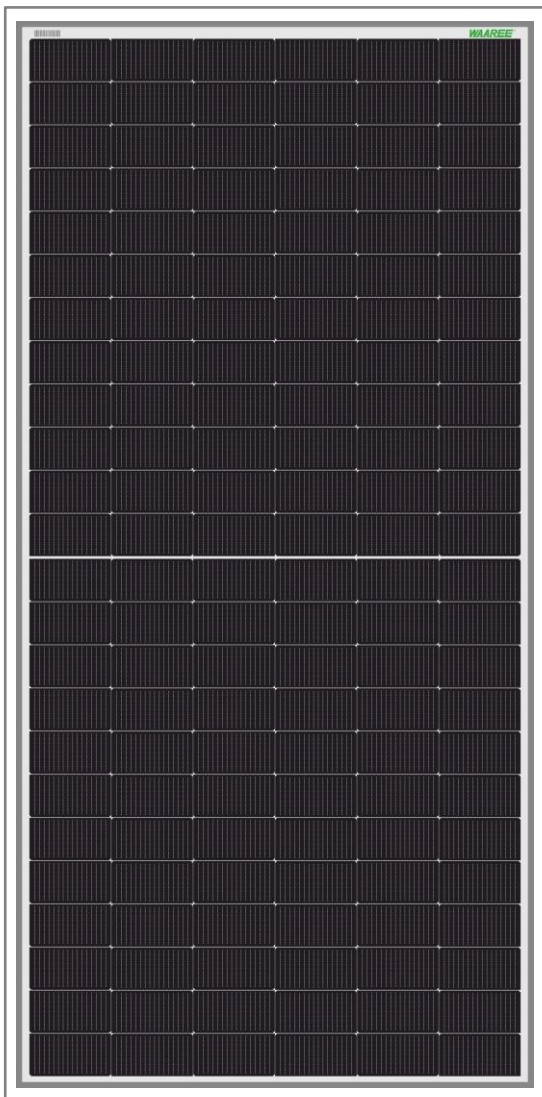
Highest commercial gains, lower LCOE



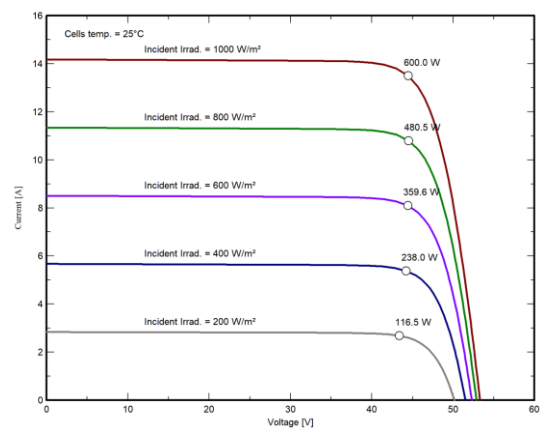
Better weak light performance



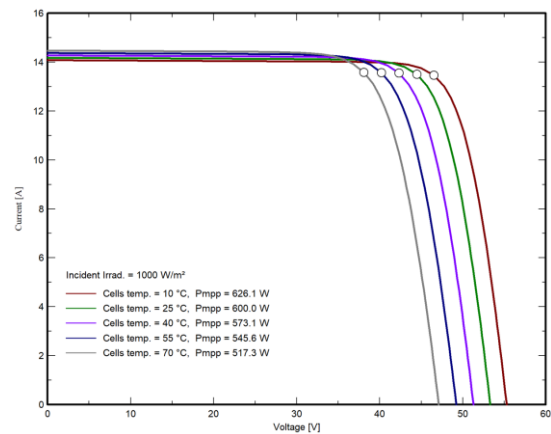
Excellent PID resistance



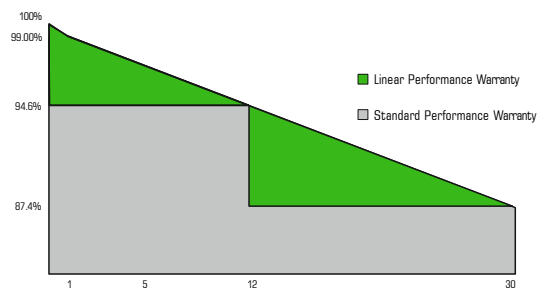
I-V VARIATION WITH IRRADIANCE



I-V VARIATION WITH TEMPERATURE



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



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

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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	
BiN-08-560	560	422.80	43.41	40.46	12.90	10.42	13.69	11.05	51.70	49.12	21.68
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%.

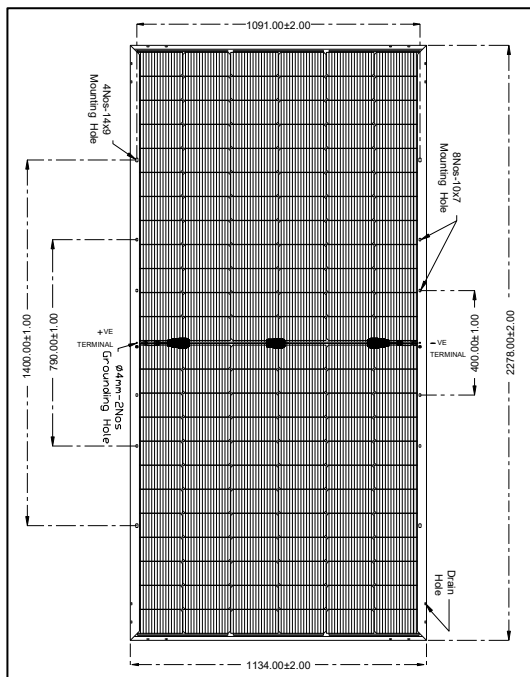
System Voltage	1500 V	Series Fuse Rating	30 A
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BI-FACIAL OUTPUT - BACKSIDE POWER GAIN*

		BiN-08-560	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)	644	650	656	661	667	673	679	684	690
	Module Efficiency (%)	24.93	25.15	25.38	25.60	25.82	26.05	26.27	26.48	26.71
20%	Power Output (W)	672	678	684	690	696	702	708	714	720
	Module Efficiency (%)	26.02	26.24	26.48	26.71	26.94	27.18	27.41	27.64	27.88
25%	Power Output (W)	700	706	713	719	725	731	738	744	750
	Module Efficiency (%)	27.10	27.34	27.5	27.83	28.06	28.31	28.55	28.79	29.04
30%	Power Output (W)	728	735	741	748	754	761	767	774	780
	Module Efficiency (%)	28.18	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



12 Years Product Warranty • 30 Years Power Output Warranty

THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), α (%/°C)	0.046
Temperature coefficient of Voltage (Voc), β (%/°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 TOPCon 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, 3 Diodes
Cable & Connector (Protection degree / Type)	IP68 rated / MC4 compatible
Cable cross - section & Length	4 mm ² & 500mm
Frame	Anodized Aluminium Alloy

- 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.

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