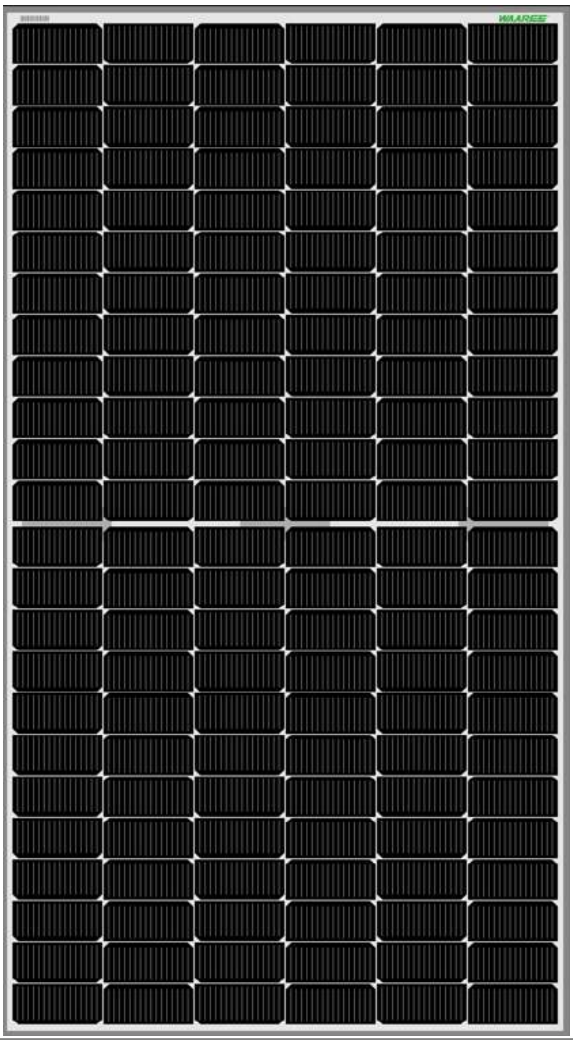
ELITE SERIES
N TOPCON TECHNOLOGY

BiN-08-560 to BiN-08-590

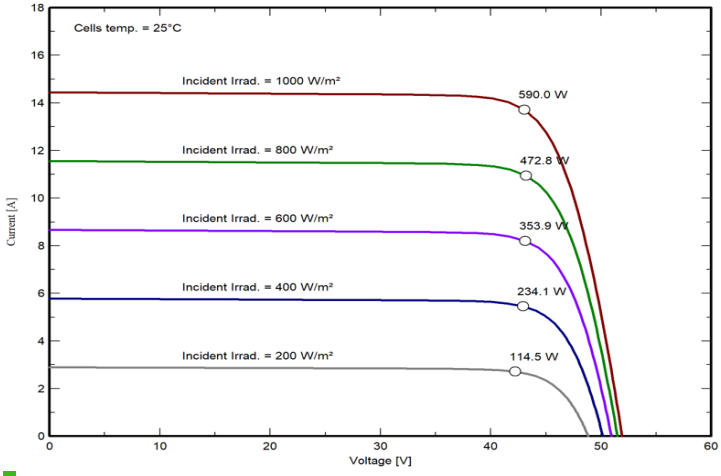
Framed Dual Glass Bifacial module

WAAREE®
One *with the* Sun

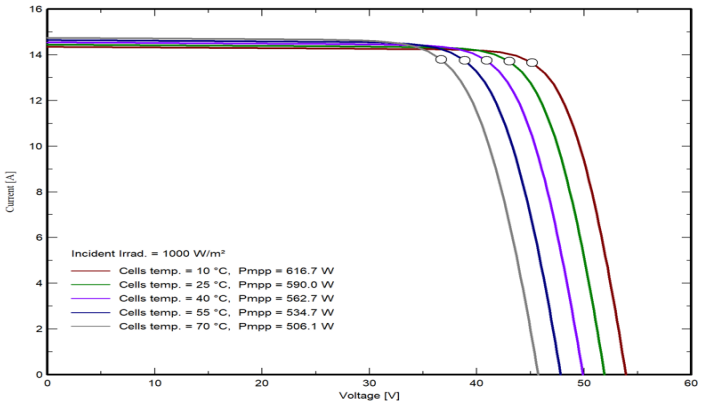
- Highest reliability & enhanced crack tolerance MBB module
- Sustain heavy snow & wind loads (5400 Pa & 2400 Pa)
- Best in class thermal coefficients
- Highest commercial gains, lower LCOE
- Better weak light performance
- Excellent PID resistance



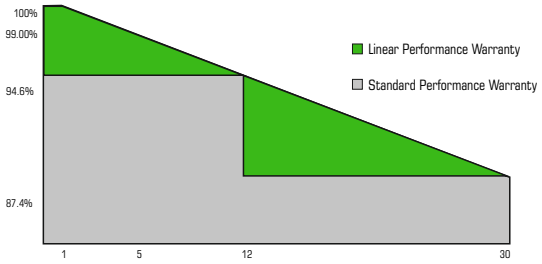
I-V VARIATION WITH IRRADIANCE



I-V VARIATION WITH TEMPERATURE



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



IEC 61215, IEC 61730
UL 61730-1, UL 61730-2

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

ELITE SERIES
N TOPCON TECHNOLOGY

BiN-08-560 to BiN-08-590

Framed Dual Glass Bifacial module

WAAREE®
One with the Sun

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	423.4	42.39	39.72	13.21	10.65	14.02	11.30	50.69	48.15	21.68
BiN-08-565	565	427.1	42.55	39.86	13.28	10.70	14.09	11.36	50.83	48.29	21.87
BiN-08-570	570	430.9	42.70	40.01	13.35	10.76	14.16	11.41	51.05	48.50	22.07
BiN-08-575	575	434.7	42.85	40.15	13.42	10.82	14.23	11.47	51.26	48.70	22.26
BiN-08-580	580	438.5	42.99	40.29	13.49	10.87	14.30	11.53	51.48	48.91	22.45
BiN-08-585	585	442.3	43.14	40.42	13.56	10.93	14.37	11.58	51.70	49.11	22.65
BiN-08-590	590	446.0	43.29	40.56	13.63	10.99	14.44	11.64	51.91	49.32	22.84

*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

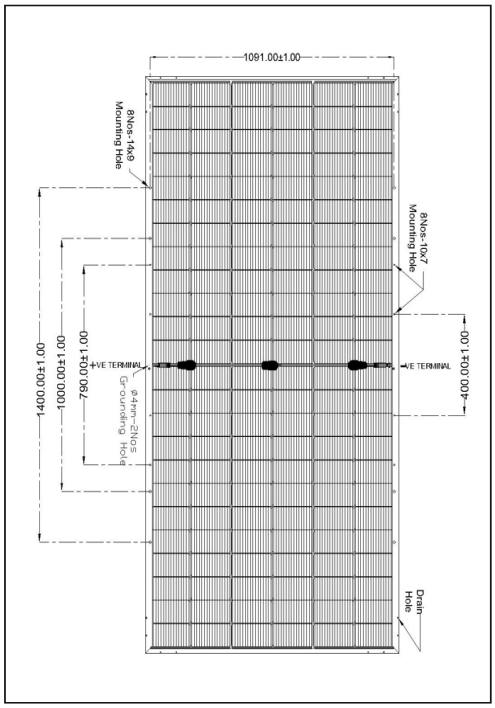
Series Fuse Rating	25 A

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
15%	Power Output (W)	644	650	655	661	667	672	678
	Module Efficiency (%)	25.01%	25.24%	25.46%	25.69%	25.91%	26.04%	26.26%
20%	Power Output (W)	672	678	684	690	696	702	708
	Module Efficiency (%)	26.10%	26.34%	26.57%	26.81%	27.04%	27.18%	27.40%
25%	Power Output (W)	700	706	712	719	725	731	737
	Module Efficiency (%)	27.19%	27.43%	27.67%	27.92%	28.16%	28.31%	28.55%
30%	Power Output (W)	728	734	741	747	754	760	767
	Module Efficiency (%)	28.27%	28.53%	28.78%	29.04%	29.29%	29.44%	29.69%

*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)	-0.31
NOCT (°C)	43 ± 2
Operating temperature range (°C)	-40 to 85
Bifaciality Factor (%)	80 ± 5

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	TOPCon N-type Mono Bifacial,91x182mm
Front / Back Glass (Material / Thickness)	2 mm Low Iron ARC 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 mm^2 & 500mm
Frame	Anodized Aluminium Alloy

Waaree Energies Ltd. is amongst the top Solar Energy Companies and has the country's largest Solar PV Module manufacturing capacity of 12 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 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.

WEL/E&PD/560-590/144/BiN-08/HC/02/20.12.2023