

ELITE SERIES

N-TYPE

BiN-17-605 to BiN-17-645

Framed Dual Glass Bifacial module

WAAREE[®]

One with the Sun



Highest reliability & enhanced crack tolerance MBB module



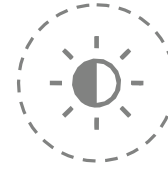
Sustain heavy snow & wind loads (5400 Pa & 2400 Pa)



Best in class thermal coefficients



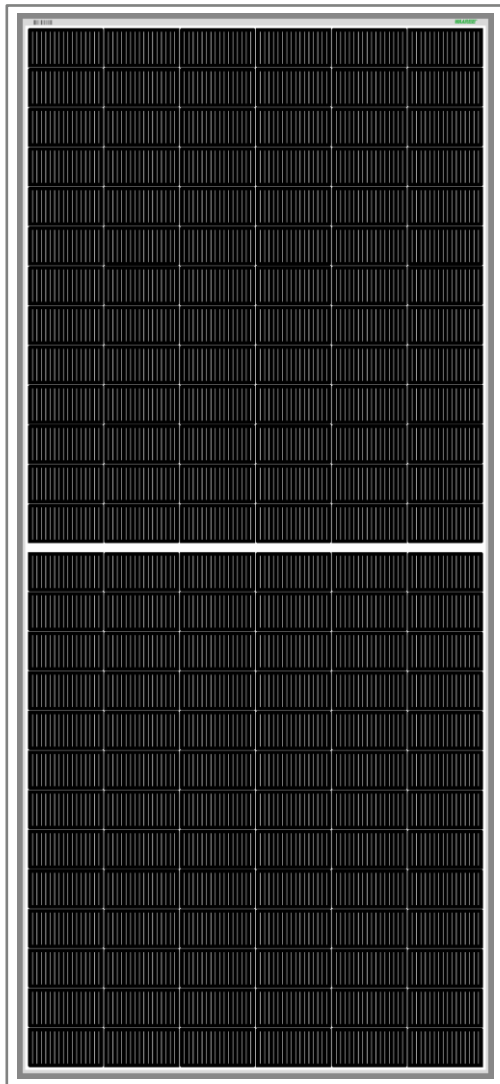
Highest commercial gains, lower LCOE



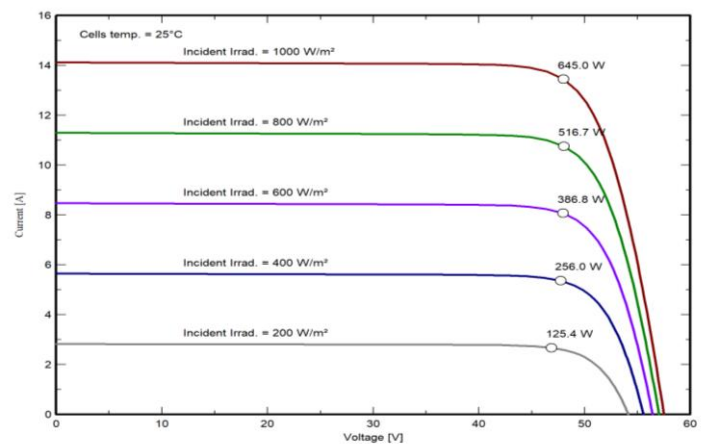
Better weak light performance



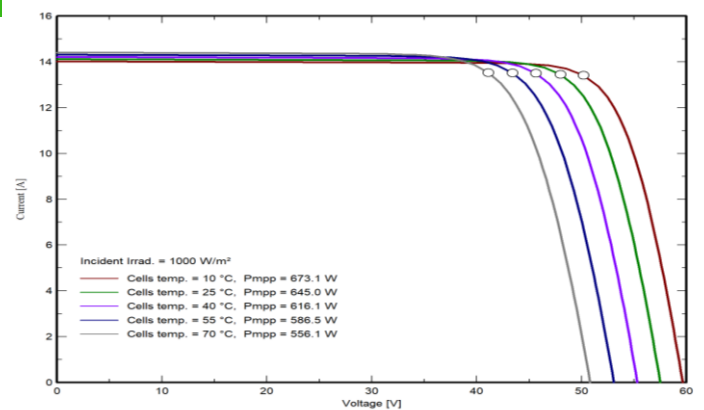
Excellent PID resistance



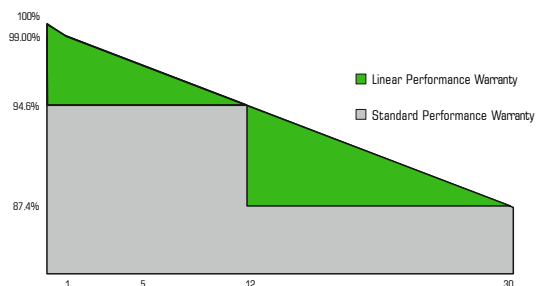
I-V VARIATION WITH IRRADIANCE



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

www.waaree.com

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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-17-605	605	456.78	46.97	43.77	12.88	10.41	13.67	11.03	56.24	53.43	21.64
BiN-17-610	610	460.55	47.11	43.90	12.95	10.46	13.72	11.07	56.40	53.58	21.82
BiN-17-615	615	464.30	47.27	44.06	13.01	10.51	13.78	11.12	56.55	53.72	22.00
BiN-17-620	620	468.10	47.44	44.21	13.07	10.56	13.83	11.16	56.71	53.87	22.18
BiN-17-625	625	471.90	47.60	44.36	13.13	10.61	13.88	11.20	56.88	54.04	22.36
BiN-17-630	630	475.70	47.73	44.48	13.20	10.67	13.94	11.25	57.02	54.17	22.54
BiN-17-635	635	479.40	47.89	44.63	13.26	10.71	13.99	11.29	57.18	54.32	22.72
BiN-17-640	640	483.20	48.01	44.75	13.33	10.77	14.05	11.34	57.33	54.46	22.90
BiN-17-645	645	487.00	48.17	44.89	13.39	10.82	14.11	11.39	57.49	54.61	23.07

*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%.

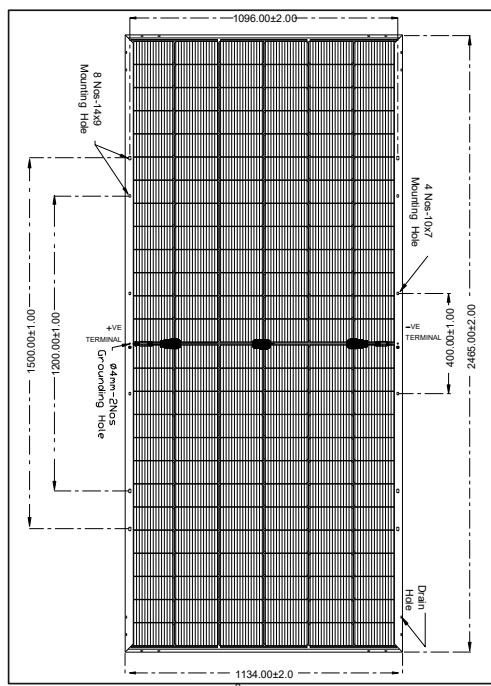
System Voltage	1500 V	Series Fuse Rating	30 A
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BI-FACIAL OUTPUT - BACKSIDE POWER GAIN*

		BiN-17-605	BiN-17-610	BiN-17-615	BiN-17-620	BiN-17-625	BiN-17-630	BiN-17-635	BiN-17-640	BiN-17-645
15%	Power Output (W)	696	702	707	713	719	725	730	736	742
	Module Efficiency (%)	24.89	25.10	25.30	25.51	25.71	25.92	26.13	26.34	26.53
20%	Power Output (W)	726	732	738	744	750	756	762	768	774
	Module Efficiency (%)	25.97	26.19	26.40	26.62	26.83	27.05	27.26	27.48	27.68
25%	Power Output (W)	756	763	769	775	781	788	794	800	806
	Module Efficiency (%)	27.05	27.28	27.50	27.73	27.95	28.18	28.40	28.63	28.84
30%	Power Output (W)	787	793	800	806	813	819	826	832	839
	Module Efficiency (%)	28.14	28.37	28.60	28.83	29.07	29.30	29.54	29.77	29.99

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

DESIGN SPECIFICATIONS



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.

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)	2465 mm (L) x 1134 mm (W) x 35 mm (T)
Weight	34.5 kgs
Solar Cells per Module (Units) / Arrangement	156 cells / (13x6 13x6)
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