

# AHNAY SERIES

Bi-66-580 to Bi-66-600

Framed Dual Glass Bifacial module

**WAAREE**<sup>®</sup>

One with the Sun



Highest reliability & enhanced crack tolerant 12BB module



Full square Mono PERC M12 cells



Best in class thermal coefficients



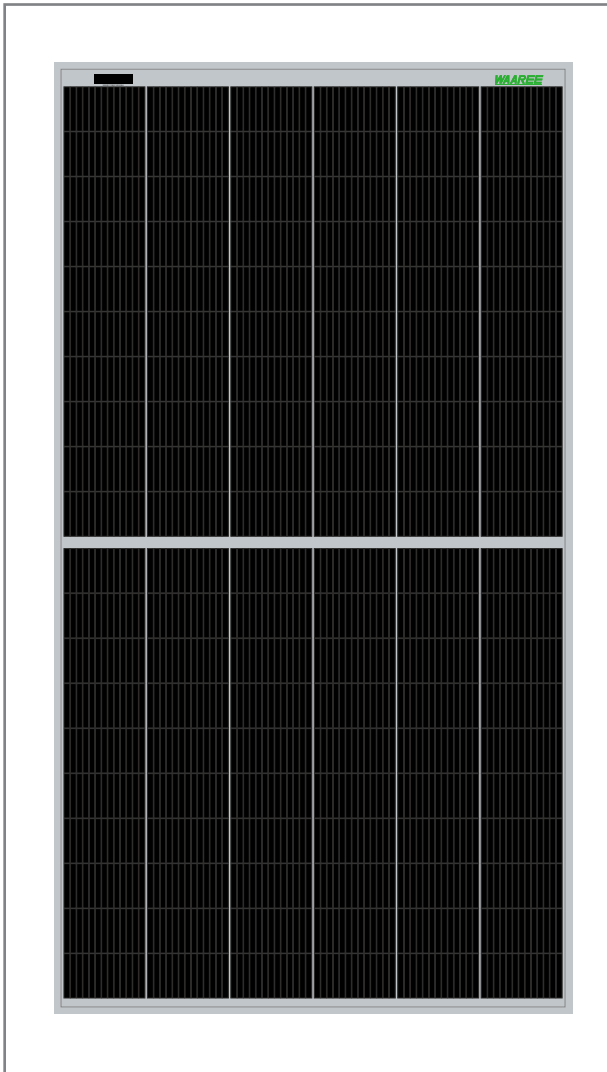
Highest commercial gains, lower LCOE



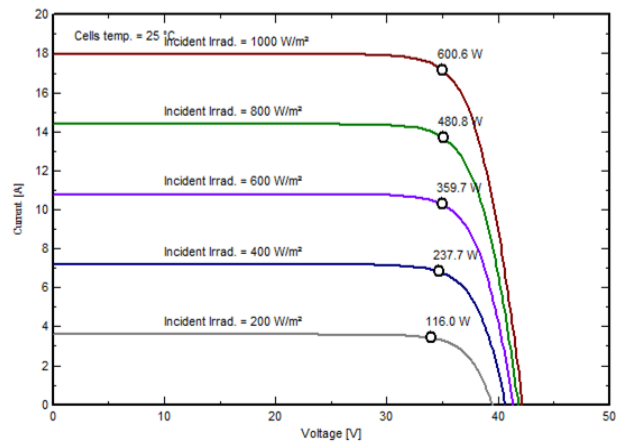
Split junction box improve heat dissipation & lower risk of hotspot



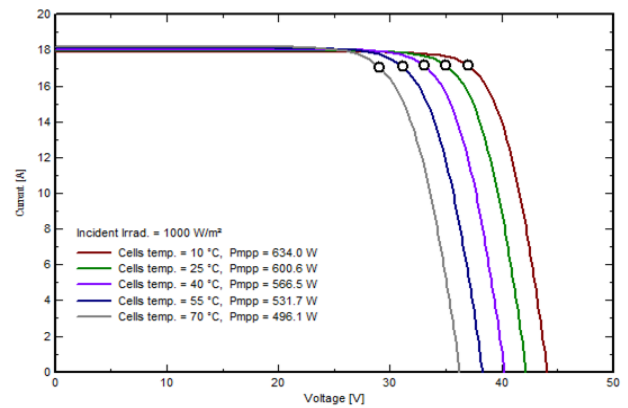
Increase shade tolerance



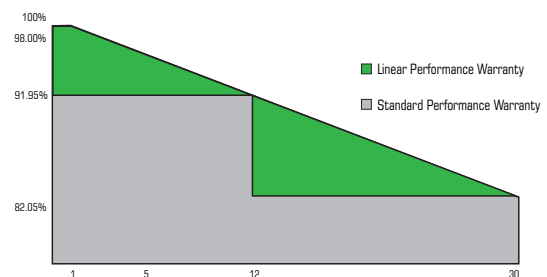
## I-V VARIATION WITH IRRADIANCE



## I-V VARIATION WITH TEMPERATURE



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



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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	
Bi-66-580	580	436.2	34.21	32.20	16.96	13.53	17.73	14.29	41.56	39.10	20.35
Bi-66-585	585	440.1	34.34	32.40	17.04	13.57	17.78	14.33	41.76	39.30	20.52
Bi-66-590	590	444.1	34.39	32.60	17.16	13.63	17.84	14.37	41.90	39.40	20.70
Bi-66-595	595	448.7	34.44	32.80	17.29	13.68	17.90	14.42	42.05	39.60	20.88
Bi-66-600	600	452.4	34.62	32.90	17.35	13.75	17.98	14.49	42.18	39.70	21.06

\*Standard Test Conditions (STC) - 1000 W/m<sup>2</sup> irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature (NOCT) - 800 W/m<sup>2</sup> irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1 m/s. Average power reduction of 4.5% at 200 W/m<sup>2</sup> as per IEC 60904-1. Measuring Uncertainty ± 3%.

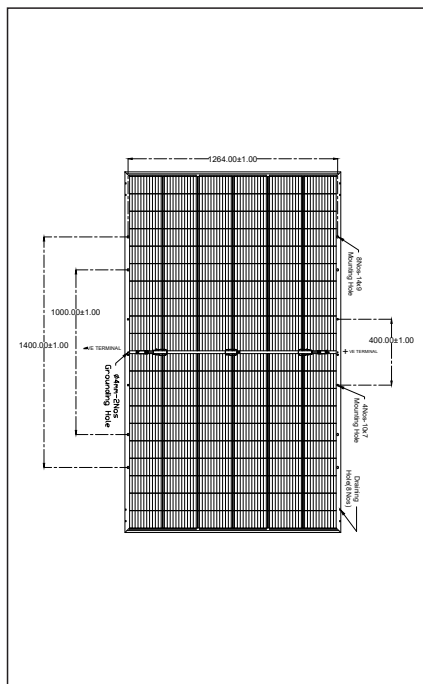
System Voltage	1500 V	Series Fuse Rating	30 A
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## BI-FACIAL OUTPUT - BACKSIDE POWER GAIN\*

		Bi-66-580	Bi-66-585	Bi-66-590	Bi-66-595	Bi-66-600
15%	Power Output (W)	667	673	679	684	690
	Module Efficiency (%)	23.40%	23.60%	23.80%	24.01%	24.22%
20%	Power Output (W)	696	702	708	714	720
	Module Efficiency (%)	24.41%	24.62%	24.83%	25.05%	25.27%
25%	Power Output (W)	725	731	738	744	750
	Module Efficiency (%)	25.43%	25.65%	25.87%	26.10%	26.32%
30%	Power Output (W)	754	761	767	774	780
	Module Efficiency (%)	26.45%	26.68%	26.90%	27.14%	27.38%

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

## DESIGN SPECIFICATIONS



## THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), $\alpha$ (%/°C)	0.04
Temperature coefficient of Voltage (Voc), $\beta$ (%/°C)	-0.25
Temperature coefficient of Power (Pm), $\gamma$ (%/°C)	-0.34
NOCT (°C)	43 ± 2
Operating temperature range (°C)	-40 to 85

## MECHANICAL CHARACTERISTICS

Length x Width x Thickness (L x W x T)	2190 mm (L) x 1302 mm (W) x 35 mm (T)
Weight	35.5 kgs
Solar Cells per Module (Units) / Arrangement	120 cells / (10x6    10x6)
Solar Cell Type & Size	Mono PERC Bifacial, 105 x 210 mm
Front / Back Glass (Material / Thickness)	2.0 mm Low Iron and 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 <sup>2</sup> & 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 5 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 325+ 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.

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