

AHNAY SERIES

Monoperc BI -560-590 W

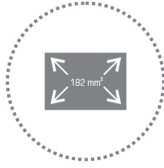
Framed dual glass bifacial module



Highest reliability & enhanced crack tolerant MBB module



Sustain heavy Snow & Wind loads (5400 Pa & 2400 Pa)



Highly efficient Mono PERC M10 cells



Best in class thermal coefficients



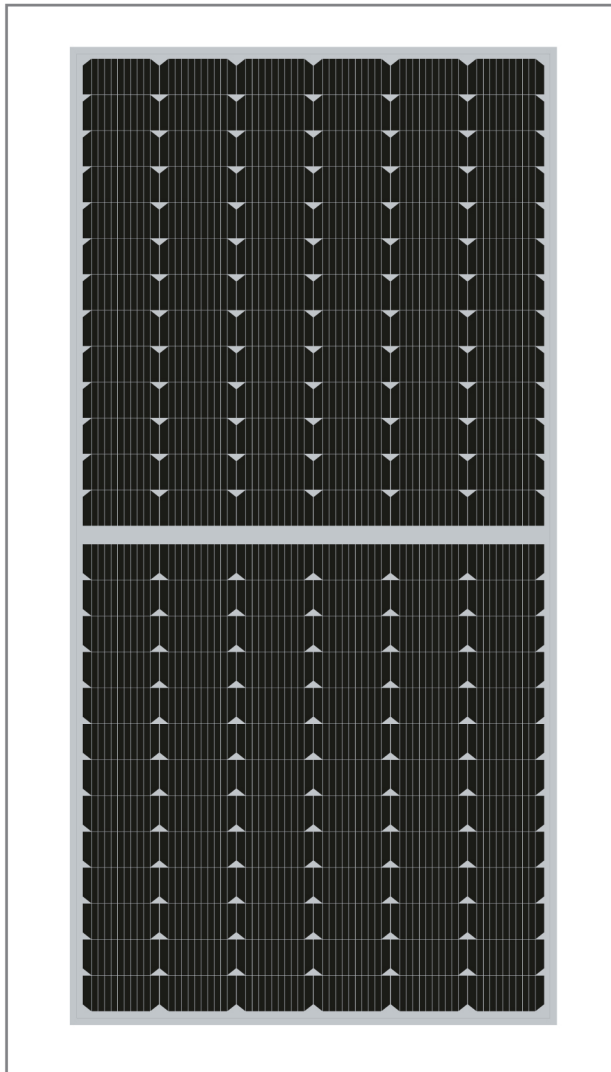
Highest commercial gains, lower LCOE



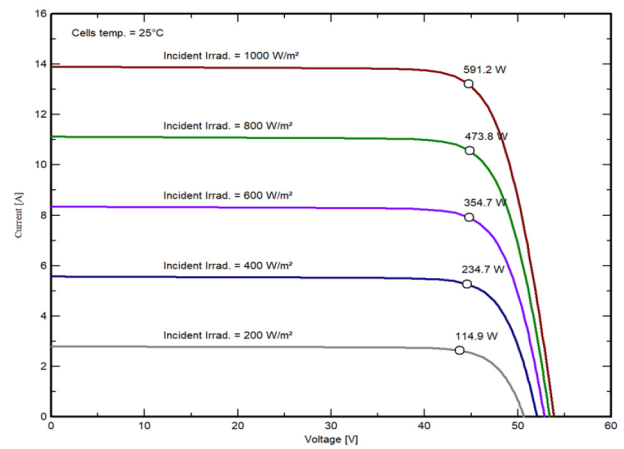
Split junction box improve heat dissipation



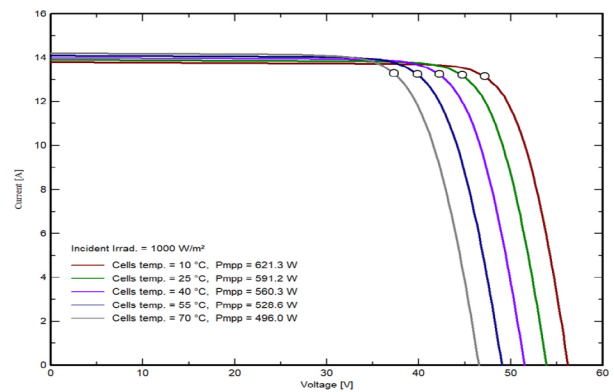
Increase shade tolerance



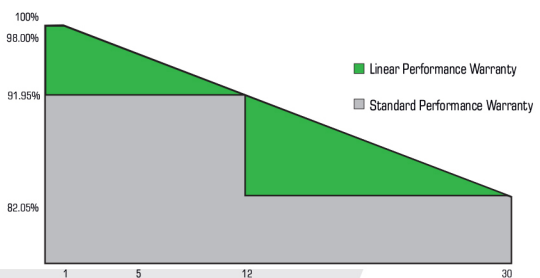
I-V VARIATION WITH IRRADIANCE



I-V VARIATION WITH TEMPERATURE



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



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Framed dual glass bifacial module



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-53-560	560	422.2	44.56	41.00	12.57	10.29	13.49	10.89	53.07	49.80	20.12
Bi-53-565	565	425.9	44.67	41.20	12.65	10.35	13.55	10.94	53.18	49.90	20.30
Bi-53-570	570	429.1	44.79	41.30	12.73	10.40	13.63	11.00	53.29	50.00	20.48
Bi-53-575	575	432.8	44.93	41.40	12.80	10.45	13.69	11.05	53.45	50.10	20.66
Bi-53-580	580	436.4	45.05	41.60	12.88	10.50	13.76	11.11	53.59	50.30	20.84
Bi-53-585	585	440.4	45.21	41.70	12.95	10.56	13.83	11.16	53.73	50.40	21.02
Bi-53-590	590	443.9	45.34	41.80	13.02	10.61	13.90	11.22	53.87	50.50	21.20

*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%.

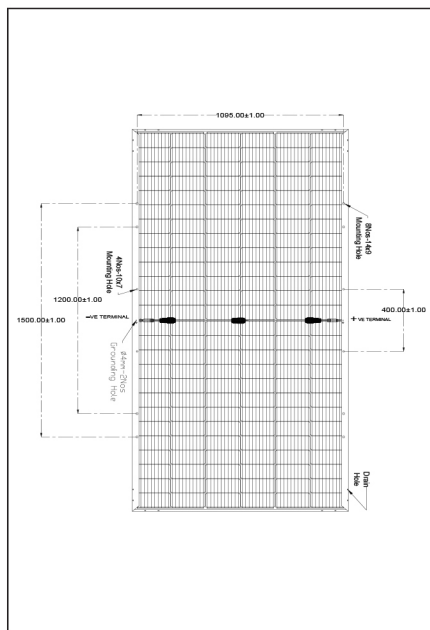
System Voltage	1500 V	Series Fuse Rating	25 A
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BI-FACIAL OUTPUT - BACKSIDE POWER GAIN*

		Bi-53-560	Bi-53-565	Bi-53-570	Bi-53-575	Bi-53-580	Bi-53-585	Bi-53-590
15%	Power Output (W)	644	650	656	661	667	673	679
	Module Efficiency (%)	23.14%	23.35%	23.56%	23.76%	23.97%	24.18%	24.38%
20%	Power Output (W)	672	678	684	690	696	702	708
	Module Efficiency (%)	24.15%	24.37%	24.58%	24.80%	25.01%	25.23%	25.44%
25%	Power Output (W)	700	706	713	719	725	731	738
	Module Efficiency (%)	25.16%	25.38%	25.61%	25.83%	26.05%	26.28%	26.50%
30%	Power Output (W)	728	735	741	748	754	761	767
	Module Efficiency (%)	26.16%	26.40%	26.63%	26.86%	27.10%	27.33%	27.56%

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

DESIGN SPECIFICATIONS



THERMAL CHARACTERISTICS

Temperature coefficient of Current (Isc), α (%/°C)	0.05
Temperature coefficient of Voltage (Voc), β (%/°C)	-0.25
Temperature coefficient of Power (Pm), γ (%/°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)	2456 mm (L) x 1133 mm (W) x 35 mm (T)
Weight	35 kgs
Solar Cells per Module (Units) / Arrangement	156 cells / (13x6 13x6)
Solar Cell Type & Size	Mono PERC Bifacial, 91 x 182 mm
Front / Back Glass (Material / Thickness)	2.0 mm Low Iron 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

- 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 & MELANA warranty statement for terms & conditions.
- MELANA Reserves the right to change the specifications without prior notice.