AHNAY SERIES

Bi-57-515 to Bi-57-545

One with the Sun

Framed glass transparent backsheet 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



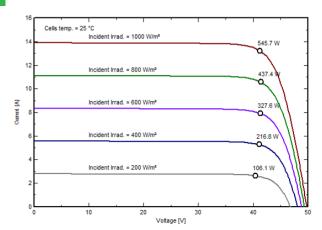
Split junction box improve heat dissipation



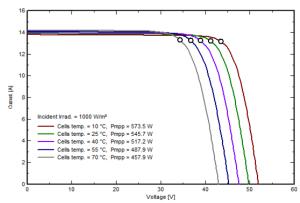
Increase shade tolerance

4 4

I-V VARIATION WITH IRRADIANCE



VARIATION WITH TEMPERATURE



 $\label{thm:consult} The \ Graphs \ are \ for \ reference \ purpose \ only. \ Please \ consult \ Waaree \ technical \ team \ for \ further \ clarifications \ descriptions \ for \ further \ clarifications \ descriptions \ descript$



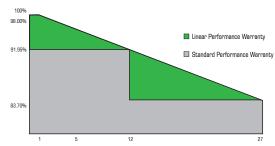












AHNAY SERIES

Bi-57-515 to Bi-57-545



Framed glass transparent backsheet bifacial module

ELECTRICAL CHARACTERISTICS

Models	Pmax	(W)	Vmp	(V)	lmp	(A)	lsc	(A)	Voc	(V)	Module Eff. (%)
IVIOUEIS	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	Module Ett. (90)
Bi-57-515	515	388.3	40.99	37.70	12.57	10.29	13.49	10.89	48.86	45.80	20.01
Bi-57-520	520	391.9	41.14	37.90	12.65	10.34	13.55	10.94	49.01	46.00	20.20
Bi-57-525	525	395.6	41.29	38.00	12.73	10.40	13.63	11.00	49.16	46.10	20.39
Bi-57-530	530	399.2	41.45	38.20	12.80	10.45	13.69	11.05	49.31	46.20	20.59
Bi-57-535	535	403.1	41.60	38.40	12.88	10.51	13.76	11.11	49.46	46.40	20.78
Bi-57-540	540	406.7	41.75	38.50	12.95	10.56	13.83	11.16	49.61	46.50	20.98
Bi-57-545	545	410.4	41.90	38.70	13.02	10.62	13.90	11.22	49.76	46.70	21.17

^{*}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%.

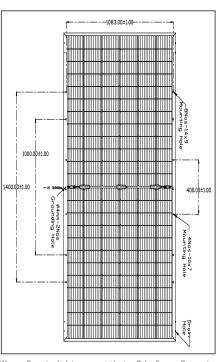
Today Today Today	System Voltage	1500 V	Series Fuse Rating	25 A
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BI-FACIAL OUTPUT - BACKSIDE POWER GAIN*

		Bi-57-515	Bi-57-520	Bi-57-525	Bi-57-530	Bi-57-535	Bi-57-540	Bi-57-545
450/	Power Output (W)	592	598	604	610	615	621	627
15%	Module Efficiency (%)	23.01%	23.23%	23.45%	23.68%	23.90%	24.12%	24.35%
000/	Power Output (W)	618	624	630	636	642	648	654
20%	Module Efficiency (%)	24.01%	24.24%	24.47%	24.71%	24.94%	25.17%	25.41%
050/-	Power Output (W)	644	650	656	663	669	675	681
25%	Module Efficiency (%)	25.01%	25.25%	25.49%	25.74%	25.98%	26.22%	26.46%
30%	Power Output (W)	670	676	683	689	696	702	709
30%	Module Efficiency (%)	26.01%	26.26%	26.51%	26.77%	27.02%	27.27%	27.52%

^{*}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), ß (%/°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)	2272 mm (L) x 1133 mm (W) x 35 mm (T)
	Weight	27.5 kgs
	Solar Cells per Module (Units) / Arrangement	144 cells / (12x6 12x6)
	Solar Cell	Mono PERC Bifacial, 91 x 182 mm
	Front Glass	3.2 mm Low Iron and Tempered glass
		with ARC coating
Γ	Rear Cover	Transparent Backsheet
		'
r	Encapsulate	PID Free & UV Resistant
	Encapsulate Junction Box (Protection degree / Material)	·
	<u>'</u>	PID Free & UV Resistant IP68 / Weatherproof PPO
	Junction Box (Protection degree / Material)	PID Free & UV Resistant IP68 / Weatherproof PPO
	Junction Box (Protection degree / Material) Cable & Connector (Protection degree / Type)	PID Free & UV Resistant IP68 / Weatherproof PP0 IP68 rated / MC4 compatible

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 • 27 Years Power Output Warranty

- The electrical data given here is for reference purpose only.
- $\bullet \ \ {\sf Please \, confirm \, your \, exact \, requirements \, with \, the \, {\sf sales \, representative \, while \, placing \, your \, order.}$
- Refer installation Manual instructions & Waaree warranty statement for terms & conditions.
- Waaree Reserves the right to change the specifications without prior notice.