#### **AHNAY SERIES**

Bi-27-380 to Bi-27-400

#### Framed Dual Glass Bifacial module





Better performance under all climatic conditions



Enhanced power output due to revolutionary design



Split junction box



Reduced power losses up to 1/4 times



PID resistant with long term reliability



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



Full square Mono PERC cells

## INTERNATIONAL &

NATIONAL CERTIFICATIONS ^

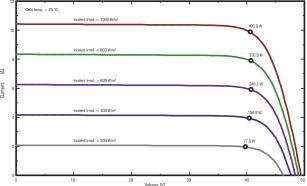
IEC 61215 | IEC 61730 | UL61730



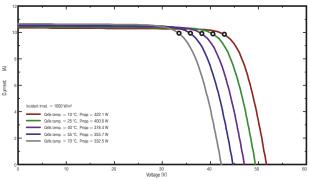




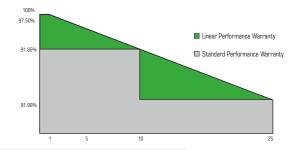
# I-V VARIATION WITH IRRADIANCE



### I-V VARIATION WITH TEMPERATURE



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



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

#### **AHNAY SERIES**

Bi-27-380 to Bi-27-400

Framed Dual Glass Bifacial module



#### **ELECTRICAL CHARACTERISTICS**

	Pmax (W)		Vmp (V)		Imp (A)		Isc (A)		Voc (V)		NA 11 Eff. (0/.)	
Models	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	- Module Eff. (%)	
Bi-27-380	380	282.7	39.07	36.58	9.75	7.73	10.16	8.21	48.14	44.73	18.56	
Bi-27-385	385	286.7	39.32	36.84	9.82	7.78	10.22	8.25	48.45	45.00	18.81	
Bi-27-390	390	290.2	39.56	37.06	9.88	7.83	10.29	8.31	48.76	45.29	19.05	
Bi-27-395	395	294.1	39.81	37.32	9.95	7.88	10.35	8.36	49.07	45.58	19.29	
Bi-27-400	400	297.8	40.07	37.55	10.02	7.93	10.42	8.42	49.39	45.88	19.54	

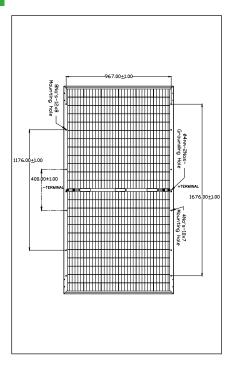
\*Standard Test Conditions (STC) - 1000 W/m2 irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature (NOCT) - 800 W/m2 irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1 m/s. Average power reduction of 4.5% at 200 W/m2 as per IEC 60904-1. Measuring Uncertainty ± 3%.

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

		Bi-27-380	Bi-27-385	Bi-27-390	Bi-27-395	Bi-27-400
15%	Power Output (W)	437	443	449	454	460
	Module Efficiency (%)	21.35%	21.63%	21.91%	22.19%	22.47%
20%	Power Output (W)	456	462	468	474	480
	Module Efficiency (%)	22.27%	22.57%	22.86%	23.15%	23.45%
25%	Power Output (W)	475	481	488	494	500
	Module Efficiency (%)	23.20%	23.51%	23.81%	24.12%	24.42%
30%	Power Output (W)	494	501	507	514	520
	Module Efficiency (%)	24.13%	24.45%	24.76%	25.08%	25.40%

#### **DESIGN** SPECIFICATIONS



### **THERMAL CHARACTERISTICS**

Temperature coefficient of Current (Isc), α (%/°C)	0.05		
Temperature coefficient of Voltage (Voc), B (%/°C)	-0.27		
Temperature coefficient of Power (Pm), γ (%/°C)	-0.37		
NOCT (°C)	43 ± 2		
Operating temperature range (°C)	-40 to 85		

#### **MECHANICAL CHARACTERISTICS**

Length x Width x Thickness (L x W x T)	2029 mm (L) x 1009 mm (W) x 40 mm (T)		
Weight	29 kgs		
Solar Cells per Module (Units) / Arrangement	144 cells / (12x6     12x6)		
Solar Cell	Mono PERC Bifacial		
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 PP0		
Cable & Connector (Protection degree / Type)	IP68 rated / MC4 compatible		
Cable cross - section & Length	4 mm² & 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 2 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 + 1000 locations nationally and  $68 \times 1000$  countries globally.

#### 10 Years Product Warranty • 25 Years Power Output Warranty

(  $^{\smallfrown}$  ) FEW MODELS MAY BE UNDER CERTIFICATION

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

www.waaree.com

<sup>\*</sup>If you need specific product certificates, and if module installations are to deviate from our guidance specified in our installation manual, please contact your local Waaree sales and technical representatives.