

NTOPCon Technology

JW Pro Series JW-HD144N

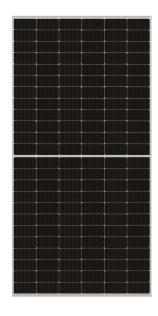
N-type Bifacial Mono Module

565-590W

IEC61215(2021), IEC61730(2016)

ISO9001:2015: Quality Management System ISO14001:2015: Environment Management System ISO45001:2018: Occupational health and safety

management systems



590W

Maximum Power Output

22.84%

Maximum Module Efficiency

 $0 \sim +5W$

Power Output Tolerance



10-30% Additional Power Generation

30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module



ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally which can increase power generation



Lower LCOE

Higher bifaciality, higher power output and lower BOS cost



Better Weak Illumination Response

Higher power output even under low-light environments like on cloudy or foggy days



Better Temperature Coefficient

Higher power generation under working conditions, thanks to passivating contact cell technology



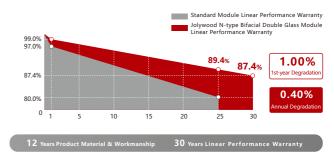
Wider Applicability

More application scenes like BIPV, vertical installation, snowfield, high-humid, windy and dusty area

Jolywood Delivers Reliable Performance Over Time

- Leader of N-type bifacial manufacturer
- · Full-automatic facility and industry-leading technology
- Best-in-class durability and reliability
- BNEF Tier One

Linear Performance Warranty















JW-HD144N Series N-type Bifacial Mono Module

Electrical Properties	STC*					
Testing Condition	Front Side					
Peak Power (Pmax) (W)	565	570	575	580	585	590
MPP Voltage (Vmp) (V)	42.6	42.8	43.0	43.2	43.4	43.6
MPP Current (Imp) (A)	13.27	13.32	13.38	13.43	13.48	13.54
Open Circuit Voltage (Voc) (V)	50.88	51.08	51.28	51.48	51.68	51.88
Short Circuit Current (Isc) (A)	14.18	14.24	14.30	14.36	14.42	14.48
Module Efficiency (%)	21.87	22.07	22.26	22.45	22.65	22.84

Electrical Properties	NOCT*					
Testing Condition	Front Side					
Peak Power (Pmax) (W)	428	432	436	440	444	448
MPP Voltage (Vmp) (V)	40.0	40.2	40.4	40.6	40.8	41.0
MPP Current (Imp) (A)	10.70	10.74	10.79	10.84	10.89	10.93
Open Circuit Voltage (Voc) (V)	48.6	48.7	48.9	49.1	49.3	49.5
Short Circuit Current (Isc) (A)	11.33	11.38	11.42	11.46	11.5	11.54

^{*}NOCT: Irradiance 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s

Operating Properties -40°C~+85°C Operating Temperature (°C) Maximum System Voltage (V) 1500V DC (IEC) Maximum Series Fuse Rating (A) 30 Power Tolerance 0~+5W Bifaciality* 80% Snow load 5400Pa, Wind load 2400Pa Front Static Load

Temperature Coefficient

Temperature Coefficient of Pmax*	-0.300%/℃	
Temperature Coefficient of Voc	-0.250%/°C	
Temperature Coefficient of Isc	+0.045%/°C	
Nominal Operating Cell Temperature (NOCT)	42±2°C	

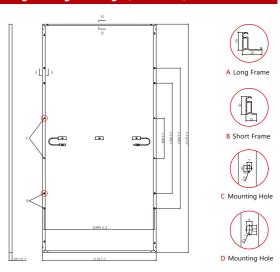
^{*}Temperature Coefficient of Pmax±0.03%/°C

Mechanical Properties	
Cell Size	182.00mm*91.00mm
Number of Cells	144pcs(6*24)
Module Dimension	2278mm*1134mm*30mm
Weight	31.5kg
Front / Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium Alloy
Junction Box	IP68 (3 diodes)
Length of Cable	4.0mm², +300mm/-180mm (Cable length can be customized)
*Host strongthonod glass	

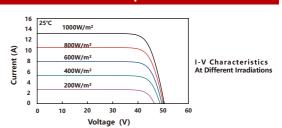
With Differe	ent Power Ge	neration Gain	(regarding	575W as an e	xample)

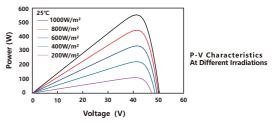
Power Gain (%)	Peak Power (Pmax) (W)	MPP Voltage (Vmp) (V)	MPP Current (Imp) (A)	Open Circuit Voltage (Voc) (V)	Short Circuit Current (Isc) (A)
10	621	43.0	14.44	51.28	15.30
15	644	43.0	14.98	51.28	15.87
20	667	43.0	15.51	51.28	16.43
25	690	43.0	16.05	51.28	17.01
30	713	43.0	16.58	51.28	17.57

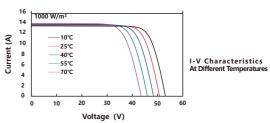
Engineering Drawing (unit: mm)



Characteristic Curves | HD144N-575







Packaging Configuration						
Packing Type	20'GP	40'GP	40'HQ			
Piece/Pallet		36				
Pallet/Container	4	10	20			
Piece/Container	144	360	720			

^{*}The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Jolywood (Taizhou) Solar Technology Co., Ltd. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.







^{*}STC: Irradiance 1000 W/m², Cell Temperature 25°C, AM1.5
The data above is for reference only and the actual data is in accordance with the pratical testing Power Measurement Tolerance ±3%

^{*}Bifaciality=Pmaxrear (STC) /Pmaxfront (STC) , Bifaciality tolerance:±5%