

### **NTOPCon Technology**

## JW Pro Series JW-HD144N

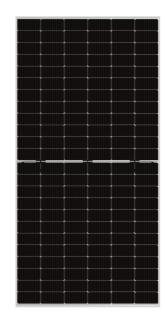
N-type Bifacial Mono Module

555-580W

IEC61215(2016), IEC61730(2016)

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

management systems



580W

Maximum Power Output

22.45%

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



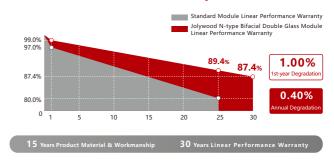
#### **Wider Applicability**

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**













D Mounting Hole

# JW-HD144N Series N-type Bifacial Mono Module

<b>Electrical Properties</b>	STC*					
Testing Condition	Front Side					
Peak Power (Pmax) (W)	555	560	565	570	575	580
MPP Voltage (Vmp) (V)	42.2	42.4	42.6	42.8	43.0	43.2
MPP Current (Imp) (A)	13.16	13.21	13.27	13.32	13.38	13.43
Open Circuit Voltage (Voc) (V)	50.48	50.68	50.88	51.08	51.28	51.48
Short Circuit Current (Isc) (A)	14.06	14.12	14.18	14.24	14.30	14.36
Module Efficiency (%)	21.48	21.68	21.87	22.07	22.26	22.45

\*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%

<b>Electrical Properties</b>	NOCT*					
Testing Condition	Front Side					
Peak Power (Pmax) (W)	421	424	428	432	436	440
MPP Voltage (Vmp) (V)	39.6	39.8	40.0	40.2	40.4	40.6
MPP Current (Imp) (A)	10.61	10.65	10.70	10.74	10.79	10.84
Open Circuit Voltage (Voc) (V)	48.2	48.4	48.6	48.7	48.9	49.1
Short Circuit Current (Isc) (A)	11.23	11.28	11.33	11.38	11.42	11.46

\*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) 30 Maximum Series Fuse Rating (A) Power Tolerance 0~+5W Bifaciality\* 80% \*Bifaciality=Pmaxrear (STC) /Pmaxfront (STC) , Bifaciality tolerance:±5%

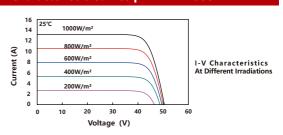
Temperature Coefficient		
Temperature Coefficient of Pmax*	-0.300%/°C	
Temperature Coefficient of Voc	-0.250%/°C	
Temperature Coefficient of Isc	+0.045%/°C	
Nominal Operating Cell Temperature (NOCT)	42±2℃	
*Temperature Coefficient of Pmax±0.03%/°C		

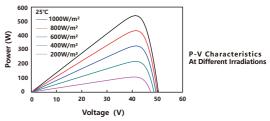
Mechanical Properti	es
Cell Size	182.00mm*91.00mm
Number of Cells	144pcs(12*12)
Module Dimension	2278mm*1134mm*30mm
Weight	32.5kg
Front / Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium Alloy
Junction Box	IP68 (3 diodes)
Length of Cable	4.0mm², +300mm/-180mm (Cable length can be customized )
*Heat strengthened glass	

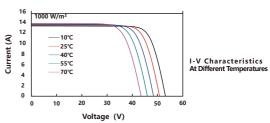
With Differe	ent Power Ge	neration Gain	(regarding	555W as an e	xample)
Power Gain (%)	Peak Power (Pmax) (W)	MPP Voltage (Vmp) (V)	MPP Current (Imp) (A)	Open Circuit Voltage (Voc) (V)	Short Circuit Current (Isc) (A)
10	597	42.2	14.13	50.4	14.96
15	617	42.2	14.62	50.4	15.48
20	638	42.2	15.11	50.4	15.99
25	659	42.3	15.59	50.5	16.51
30	680	12.3	16.08	50.5	17.02

## **Engineering Drawing (unit: mm)** A Long Frame B Short Frame ري \_ • C Mounting Hole

#### Characteristic Curves | HD144N-555







Packaging Configuration						
Packing Type	20'GP	40'GP	40'HQ			
Piece/Pallet		35				
Pallet/Container	4	10	20			
Piece/Container	140	350	700			

<sup>\*</sup>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.



Add: No.6 Kaiyang Rd., Jiangyan Economic Development Zone,

TEL: +86 523 80612799 Email: mkt@jolywood.cn



Taizhou, Jiangsu Province, China, 225500