

## **NTOPCon Technology**

# JW-HD144N

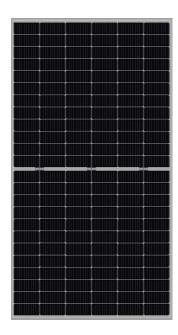
N-type Bifacial Double Glass Mono Module

540-565W

Cell Type



**11BB** 



**565W** 

Maximum Power Output

21.80%

Maximum Module Efficiency

 $0 \sim +5W$ 

**Power Output Tolerance** 



#### 10-30% Additional Power Generation Gain

30 years lifespan brings 10-30% additional power generation comparing with conventional product



### **ZERO LID (Light Induced Degradation)**

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



#### **Lower LCOE**

High bifaciality, high power output, saving **BOS** cost



#### **Better Weak Illumination Response**

Wide spectral response, higher power output even under low-light settings like smog or cloudy days



#### **Better Temperature Coefficient**

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



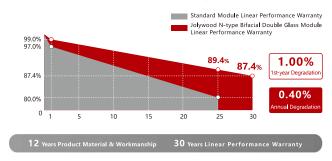
#### **Wider Applicability**

BIPV, vertical installation, snowfield, high-humid area, windy and dusty area

#### **Jolywood Delivers Reliable Performance Over Time**

- Leader of N-type bifacial technology
- Fully automatic facility and world-class technology
- Long term reliability tests passed
- BNEF Tier One

#### **Linear Performance Warranty**













# JW-HD144N Series N-type Bifacial Double Glass Mono Module

<b>Electrical Properties</b>	STC*					
Testing Condition	Front Side					
Peak Power (Pmax) (W)	540	545	550	555	560	565
MPP Voltage (Vmp) (V)	41.6	41.8	42.0	42.2	42.4	42.6
MPP Current (Imp) (A)	12.99	13.04	13.10	13.16	13.21	13.27
Open Circuit Voltage (Voc) (V)	49.8	50.0	50.2	50.4	50.6	50.8
Short Circuit Current (Isc) (A)	13.75	13.81	13.87	13.93	13.99	14.05
Module Efficiency (%)	20.84	21.03	21.23	21.42	21.61	21.80

<b>Electrical Properties</b>	NOCT*					
Testing Condition	Front Side					
Peak Power (Pmax) (W)	408	412	416	420	424	427
MPP Voltage (Vmp) (V)	39.0	39.2	39.4	39.6	39.8	39.9
MPP Current (Imp) (A)	10.47	10.51	10.56	10.61	10.65	10.70
Open Circuit Voltage (Voc) (V)	47.6	47.8	48.0	48.2	48.4	48.6
Short Circuit Current (Isc) (A)	11.09	11.13	11.18	11.23	11.28	11.33

<sup>\*</sup>NOCT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s

#### **Operating Properties** Operating Temperature (°C)

Maximum System Voltage (V)	1500V (IEC)	
Maximum Series Fuse Rating (A)	30	
Power Tolerance	0~+5W	
Bifaciality*	75%	

-40°C~+85°C

#### **Temperature Coefficient**

Temperature Coefficient of Pmax*	-0.320%/℃	
Temperature Coefficient of Voc	-0.260%/°C	
Temperature Coefficient of Isc	+0.046%/°C	
Nominal Operating Cell Temperature (NOCT)	42±2℃	

<sup>\*</sup>Temperature Coefficient of Pmax±0.03%/°C

#### **Mechanical Properties**

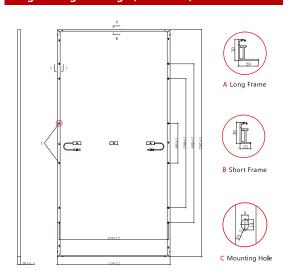
Cell Type	182.00mm*91.00mm
Number of Cells	144pcs(12*12)
Dimension	2285mm*1134mm*30mm
Weight	32.5kg
Front / Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium
Junction Box	IP68 (3 diodes)
Length of Cable*	4.0mm <sup>2</sup> , +300mm/-180mm
Connector	MC4 Compatible

<sup>\*</sup>Heat strengthened glass \*Cable length can be customized

## With Different Power Generation Gain (regarding 550W as an example)

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	586	41.8	14.00	50.0	14.83
15	606	41.9	14.49	50.1	15.34
20	627	41.9	14.97	50.1	15.85
25	647	41.9	15.45	50.1	16.36
30	668	41.9	15.93	50.1	16.88

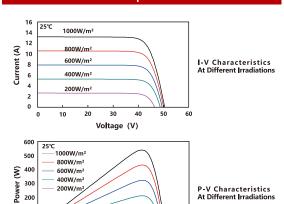
#### **Engineering Drawing (unit: mm)**

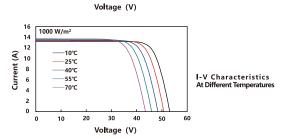


#### Characteristic Curves | HD144N-550

100 0

10





60

30

Packaging Configuration					
Packing Type	20'GP	40'GP	40'HQ		
Piece/Pallet		35			
Pallet/Container	5	10	20		
Piece/Container	175	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.







<sup>\*</sup>STC: Irradiance 1000 W/m³, 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%

<sup>\*</sup>Bifaciality=Pmaxrear (STC) /Pmaxfront (STC) , Bifaciality tolerance: $\pm 5\%$