

NTOPCon Technology

JW-HD108N

N-type

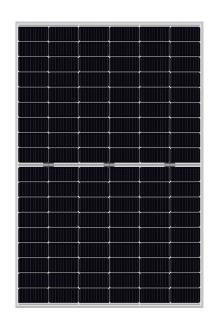
Bifacial Double Glass Mono Module

405-425W

Cell Type



11BB



425W

Maximum Power Output

21.69%

Maximum Module Efficiency

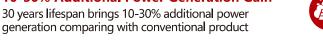
 $0 \sim + 5W$

Power Output Tolerance



10-30% Additional Power Generation Gain

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



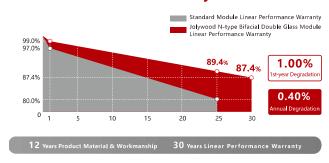
Wider Applicability

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-HD108N Series N-type Bifacial Double Glass Mono Module

Electrical Properties	STC*				
Testing Condition	Front Side				
Peak Power (Pmax) (W)	405	410	415	420	425
MPP Voltage (Vmp) (V)	31.3	31.5	31.7	31.9	32.1
MPP Current (Imp) (A)	12.95	13.02	13.10	13.17	13.24
Open Circuit Voltage (Voc) (V)	37.3	37.5	37.7	37.9	38.1
Short Circuit Current (Isc) (A)	13.75	13.82	13.91	13.98	14.05
Module Efficiency (%)	20.67	20.92	21.18	21.43	21.69

Open Circuit Voltage (Voc) (V)

Short Circuit Current (Isc) (A) 11.09

^{*}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%

Electrical Properties NOCT*					
Testing Condition	Front Side				
Peak Power (Pmax) (W)	306	310	314	318	322
MPP Voltage (Vmp) (V)	29.3	29.5	29.7	29.9	30.1
MPP Current (Imp) (A)	10.44	10.50	10.56	10.62	10.67

35.8

36.0

36.2

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

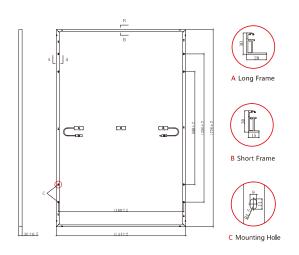
Operating Properties Operating Temperature (°C) -40°C~+85°C 1500V (IEC) Maximum System Voltage (V) Maximum Series Fuse Rating (A) 30 Power Tolerance 0~+5W Bifaciality*

Temperature Coefficient		
Temperature Coefficient of Pmax*	-0.320%/℃	
Temperature Coefficient of Voc	- 0.260%/℃	
Temperature Coefficient of Isc	+0.046%/°C	
Nominal Operating Cell Temperature (NOCT)	42±2°C	
*Temperature Coefficient of Pmax±0.03%/°C		

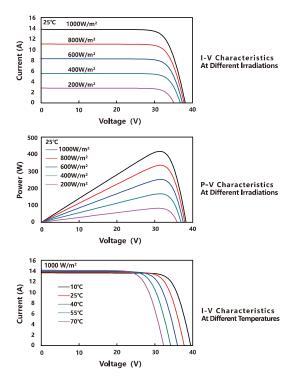
Mechanical Properties	
Cell Type	182.00mm*91.00mm
Number of Cells	108pcs(12*9)
Dimension	1728mm*1134mm*30mm
Weight	24.5kg
Front / Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium
Junction Box	IP68 (3 diodes)
Length of Cable*	4.0mm², +300mm/-180mm
Connector	MC4 Compatible
*Heat strengthened glass *Cable length can be customized	

With Different Power Generation Gain (regarding 415W 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	446	31.7	14.07	37.7	14.93
15	462	31.7	14.55	37.7	15.43
20	477	31.7	15.04	37.7	15.94
25	493	31.7	15.52	37.7	16.45
30	508	31.8	16.01	37.8	16.96

Engineering Drawing (unit: mm)



Characteristic Curves | HD108N-415



Packaging Configuration					
Packing Type	20'GP	40'GP	40'HQ		
Piece/Pallet		36			
Pallet/Container	6	13	26		
Piece/Container	216	468	936		

^{*}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, Taizhou, Jiangsu Province, China, 225500

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



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