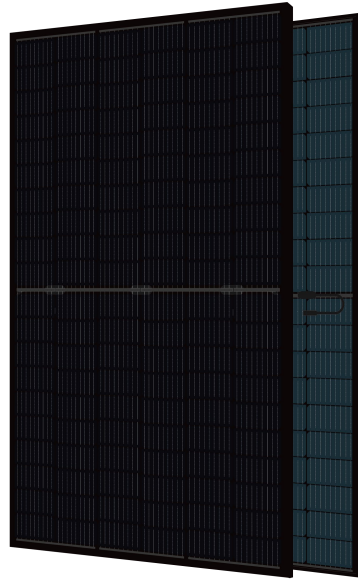


# JW-HD120N

N-type  
Bifacial Double Glass Mono Black Module

**365-385W**

IEC61215(2016), IEC61730(2016)  
ISO9001:2015: Quality Management System  
ISO14001:2015: Environment Management System  
ISO45001:2018: Occupational health and safety management systems



**385W**

Maximum Power Output

**21.10%**

Maximum Module Efficiency

**0~+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



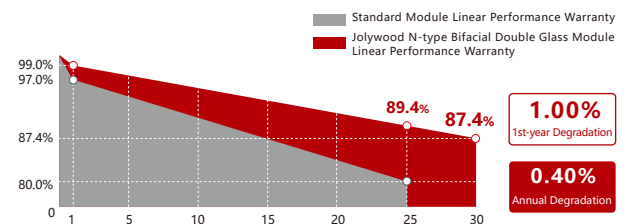
### Outstanding visual appearance

Designed with aesthetics in mind, thinner wires that appear all black at a distance

## 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



25 Years Product Material & Workmanship\* 30 Years Linear Performance Warranty

\*Subject to the terms and conditions contained in the applicable Jolywood Solar Limited Warranty Statement. Also this 25-year limited product warranty is available only for products installed and operating on residential rooftops in certain regions.

# JW-HD120N Series | N-type Bifacial Double Glass Mono Black Module

## Electrical Properties | STC\*

Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	365	370	375	380	385
MPP Voltage (Vmp) (V)	34.3	34.5	34.7	34.9	35.1
MPP Current (Imp) (A)	10.65	10.73	10.81	10.89	10.97
Open Circuit Voltage (Voc) (V)	41.2	41.4	41.6	41.8	42.0
Short Circuit Current (Isc) (A)	11.27	11.36	11.45	11.54	11.62
Module Efficiency (%)	20.01	20.28	20.55	20.83	21.10

\*STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, AM1.5  
The data above is for reference only and the actual data is in accordance with the practical testing  
Power Measurement Tolerance ±3%

## Electrical Properties | NOCT\*

Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	276	280	284	287	291
MPP Voltage (Vmp) (V)	32.2	32.4	32.5	32.7	32.9
MPP Current (Imp) (A)	8.59	8.65	8.72	8.78	8.84
Open Circuit Voltage (Voc) (V)	39.4	39.6	39.8	40.0	40.1
Short Circuit Current (Isc) (A)	9.09	9.16	9.23	9.30	9.37

\*NOCT: Irradiance 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s

## Operating Properties

Operating Temperature (°C)	-40°C~+85°C
Maximum System Voltage (V)	1500V DC (IEC)
Maximum Series Fuse Rating (A)	25
Power Tolerance	0~+5W
Bifaciality*	80%

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

## Temperature Coefficient

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

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

## Mechanical Properties

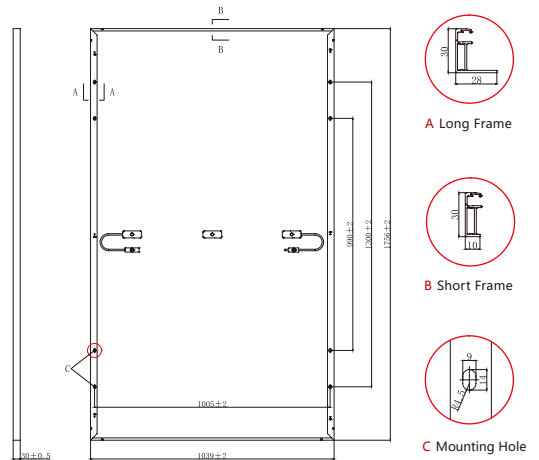
Cell Size	166.00mm*83.00mm
Number of Cells	120pcs(12*10)
Module Dimension	1756mm*1039mm*30mm
Weight	23kg
Front / Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium Alloy
Junction Box	IP68 (3 diodes)
Length of Cable	4.0mm <sup>2</sup> , +300mm/-180mm (Cable length can be customized)

\*Heat strengthened glass

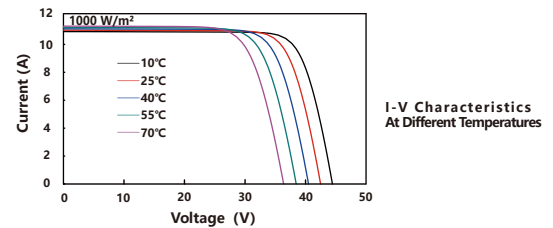
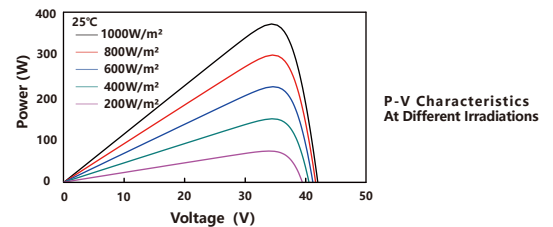
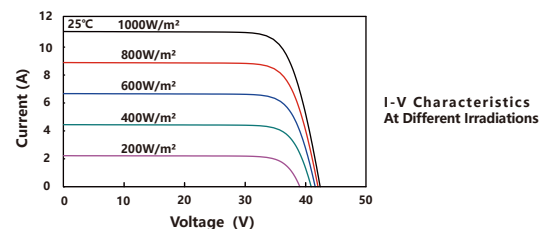
## With Different Power Generation Gain (regarding 380W as an example)

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	410	34.9	11.75	41.8	12.44
15	426	34.9	12.18	41.8	12.89
20	441	35.0	12.61	41.9	13.34
25	456	35.0	13.04	41.9	13.79
30	471	35.0	13.47	41.9	14.24

## Engineering Drawing (unit: mm)



## Characteristic Curves | HD120N-380



## 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.

