

NTOPCon Technology

JW Pro Series JW-HD144N

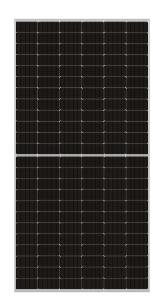
N-type Bifacial Mono Module

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



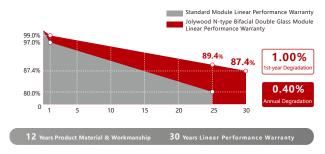
Wider Applicability

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

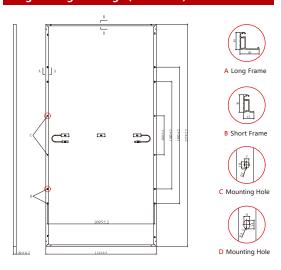
Operating Properties Operating Temperature (°C) -40°C∼+85°C Maximum System Voltage (V) 1500V DC (IEC) Maximum Series Fuse Rating (A) 30 Power Tolerance 0~+5W Bifaciality* Front Static Load Snow load 5400Pa, Wind load 2400Pa

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

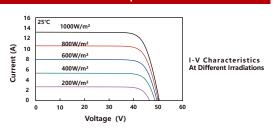
| Mechanical Propertie | es |
|--------------------------|---|
| Cell Size | 182.00mm*91.00mm |
| Number of Cells | 144pcs(6*24) |
| Module Dimension | 2278mm*1134mm*30mm |
| Weight | 32.5kg |
| Front / Rear Glass* | 2.0mm/2.0mm |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68 (3 diodes) |
| Length of Cable | 4.0mm², +300mm/-180mm (Cable length can be customized) |
| *Heat strengthened glass | |

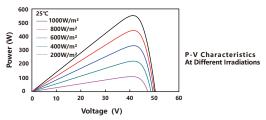
| With Different Power Generation Gain (regarding 575W as an example) | | | | | | |
|---|--------------------------|--------------------------|--------------------------|-----------------------------------|------------------------------------|--|
| Power Gain (%) | Peak Power (Pmax) (W) | MPP Voltage (Vmp) (V) | MPP Current (Imp) (A) | Open Circuit Voltage (Voc) (V) | Short Circuit Current (Isc) (A) | |
| 10 | 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 | |

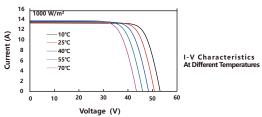
Engineering Drawing (unit: mm)



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 energiantian and how factures described in this detections may devicte slightly and | | | | | |

*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



^{*}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: $\pm 5\%$