

JW Pro Series

n-Type Bifacial Dual Glass Mono Module

JW-HD144N-R0

JW-HD144N-R0-570

JW-HD144N-R0-575

JW-HD144N-R0-580

JW-HD144N-R0-585

JW-HD144N-R0-590

JW-HD144N-R0-595

Maximum
Power Output

595W

Maximum Module
Efficiency

23.03%

Power Output
Tolerance

0~+3%
n-TOPCon


Higher Customer Value

- Lower 1st-year and annual degradation
- Lower system BOS cost, higher power generation, lower LCOE, and higher ROI
- Dual-side power generation, with up to 30% increase in backside power generation in different installation environments, further reducing overall BOS and LCOE



Higher Power Generation Gain

- Excellent IAM property and better weak illumination response
- Lower 1st-year degradation (1%) and annual degradation (0.4%)
- Lower temperature coefficient (-0.30%) and lower operating temperature, resulting in more power generation



High Reliability

- Apply latest generation TOPCon technology with lower LID
- Apply innovative non-destructive cutting technology to reduce the risk of micro cracks
- Withstand harsh environmental conditions



High Safety

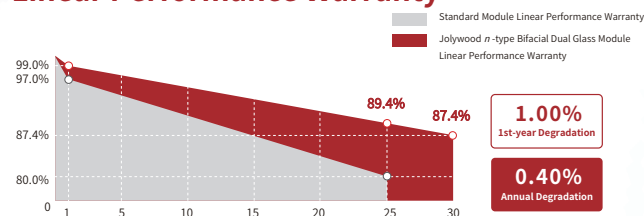
- Latest TOPCon technology with no polysilicon wrap around, zero leakage current and better resistance to hot-spot.
- Pass mechanical load test of 5400Pa on the front side and 2400Pa on the back side



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



15 Years Product Material & Workmanship 30 Years Linear Performance Warranty

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IEC61215(2021)

IEC61730(2023)



JW-HD144N-R0 | *n*-type Bifacial Dual Glass Mono Module

Electrical Properties | STC*

Module Type	JW-HD144N-R0-570	JW-HD144N-R0-575	JW-HD144N-R0-580	JW-HD144N-R0-585	JW-HD144N-R0-590	JW-HD144N-R0-595
Peak Power (P _{max}) (W)	570	575	580	585	590	595
MPP Voltage (V _{mp}) (V)	44.07	44.25	44.43	44.61	44.79	44.97
MPP Current (I _{mp}) (A)	12.93	12.99	13.05	13.11	13.17	13.23
Open Circuit Voltage (V _{oc}) (V)	51.37	51.57	51.77	51.97	52.17	52.37
Short Circuit Current (I _{sc}) (A)	13.70	13.76	13.82	13.88	13.94	14.00
Module Efficiency (%)	22.07	22.26	22.45	22.65	22.84	23.03

*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 practical testing
Power Measurement Tolerance: ±3%, V_{oc} Tolerance: ±4%, I_{sc} Tolerance: ±5% Testing Condition: Front Side

BNPI & Bifaciality coefficient

Module Type		JW-HD144N -R0-570	JW-HD144N -R0-575	JW-HD144N -R0-580	JW-HD144N -R0-585	JW-HD144N -R0-590	JW-HD144N -R0-595
BNPI	Pmax (W)	627.00	632.50	638.00	643.50	649.00	654.50
	Voc (V)	51.52	51.72	51.93	52.13	52.33	52.53
	Isc (A)	15.07	15.13	15.20	15.27	15.33	15.40
Bifaciality coefficient	ΦPmax (±10%)	80	80	80	80	80	80
	ΦVoc (±3%)	99	99	99	99	99	99
	ΦIsc (±10%)	79	79	79	79	79	79

Electrical Properties Under Different Rear Gain | HD144N-590

Power Gain (%)	Peak Power (P _{max}) (W)	MPP Voltage (V _{mp}) (V)	MPP Current (I _{mp}) (A)	Open Circuit Voltage (V _{oc}) (V)	Short Circuit Current (I _{sc}) (A)
10	649.0	44.59	14.55	51.97	15.40
15	678.5	44.59	15.22	51.97	16.10
20	708.0	44.69	15.84	52.07	16.77
25	737.5	44.69	16.50	52.07	17.47
30	767.0	44.69	17.16	52.07	18.17

Operating Properties

Operating Temperature	-40°C ~ +85°C
Maximum System Voltage	1500V (IEC)
Maximum Series Fuse Rating	30A
Bifaciality*	80%
Front Static Load	Snow load 5400Pa, Wind load 2400Pa

*Bifaciality = P_{maxrear} (STC) / P_{maxfront} (STC), Bifaciality tolerance: ±5%

Temperature Coefficient

Temperature Coefficient of P _{max} *	-0.300%/°C
Temperature Coefficient of V _{oc}	-0.250%/°C
Temperature Coefficient of I _{sc}	+0.045%/°C
Nominal Operating Cell Temperature (NOCT)	42±2°C

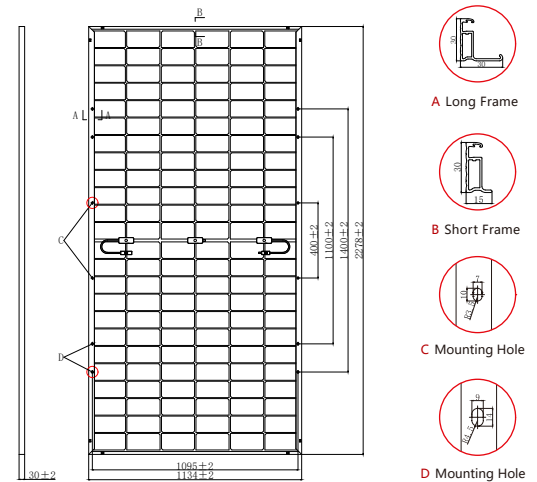
*Temperature Coefficient of P_{max} ±0.03%/°C

Specification

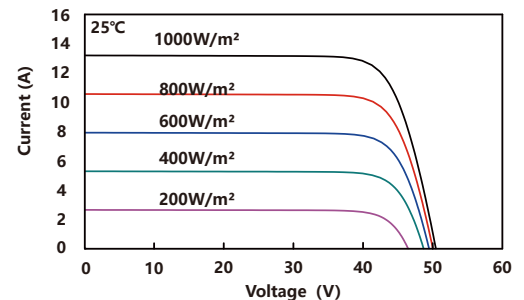
Number of Cells	144pcs
Module Dimension	2278mm*1134mm*30mm
Weight	32.0kg
Front / Rear Glass*	2.0mm/2.0mm Heat strengthened glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 (3 diodes)
Length of Cable	4.0mm ² , +300mm/-180mm (Cable length can be customized)
Packaging Configuration	36pcs/Pallet, 720/40HQ Container
Country of Origin	China
Fire Rating	C
Connector Model	QC Solar QC4.10-cds / Staubli EVO2

*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.

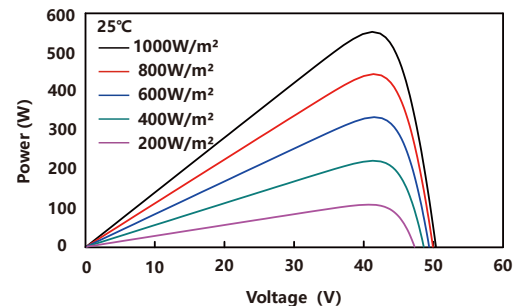
Engineering Drawing (unit: mm)



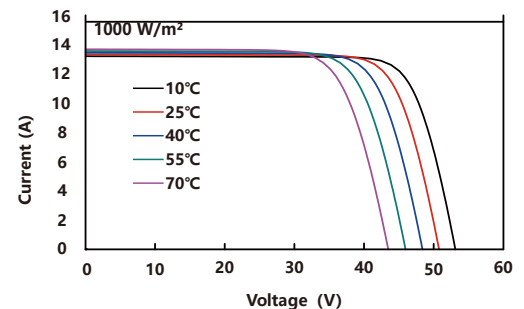
Characteristic Curves | HD144N-590



I-V Characteristics At Different Irradiations



P-V Characteristics At Different Irradiations



I-V Characteristics At Different Temperatures

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