

# NIWA *Ultra*

## JBC Dual-Glass Module

**JW-HD96J-R2**

JW-HD96J-R2-460 JW-HD96J-R2-465  
JW-HD96J-R2-470 JW-HD96J-R2-475  
JW-HD96J-R2-480 JW-HD96J-R2-485

- Minimalist, ultra-black design with aesthetic appeal
- High efficiency with low degradation, maximizing power generation
- Shadow optimization technology
- Reduced hot spot risks, enhanced operation safety

**15** Product Warranty

**30** Performance Warranty

**Add:** No.6 Kaiyang Rd., Jiangyan Economic Development Zone,  
Taizhou, Jiangsu Province, China, 225500

**TEL:** +86 523 80612799

**Email:** info@jolywood.cn



IEC61215(2021)  
IEC61730(2023)

[www.jolywood.com](http://www.jolywood.com)



@Jolywood Solar

<b>485W</b> Maximum Power Output	<b>24.3%</b> Maximum Module Efficiency	<b>0~+3%</b> Power Output Tolerance	<b>&lt;1%</b> 1st-year Degradation	<b>&lt;0.35%</b> Annual Degradation
-------------------------------------	---	--	---------------------------------------	--

### Electrical Properties STC\*

Module Type	JW-HD96J-R2-460	JW-HD96J-R2-465	JW-HD96J-R2-470	JW-HD96J-R2-475	JW-HD96J-R2-480	JW-HD96J-R2-485
Peak Power (Pmax) (W)	460	465	470	475	480	485
MPP Voltage (Vmp) (V)	30.42	30.52	30.62	30.72	30.82	30.92
MPP Current (Imp) (A)	15.12	15.23	15.35	15.46	15.57	15.68
Open Circuit Voltage (Voc) (V)	35.70	35.80	35.90	36.00	36.10	36.20
Short Circuit Current (Isc) (A)	16.19	16.29	16.38	16.48	16.57	16.67
Module Efficiency (%)	23.0	23.3	23.5	23.8	24.0	24.3

\*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%, Voc Tolerance: ±4%, Isc Tolerance: ±5% Testing Condition: Front Side

### BNPI & Bifaciality Coefficient & BSI

Module Type	JW-HD96J-R2-460	JW-HD96J-R2-465	JW-HD96J-R2-470	JW-HD96J-R2-475	JW-HD96J-R2-480	JW-HD96J-R2-485	
BNPI*	Pmax (W)	506.0	511.5	517.0	522.5	528.0	533.5
	Voc (V)	35.81	35.91	36.01	36.11	36.21	36.31
	Isc (A)	17.81	17.91	18.02	18.13	18.23	18.34
Bifaciality coefficient	ΦPmax (±10%)	70	70	70	70	70	70
	ΦVoc (±3%)	99	99	99	99	99	99
	ΦIsc (±10%)	68	68	68	68	68	68
BSI*	Isc (A)	19.79	19.91	20.02	20.14	20.26	20.37

\*BNPI: Power Measurement Tolerance ±3%, Voc Tolerance: ±4%, Isc Tolerance: ±5%  
\*BSI: Isc Tolerance: ±5%

### Mechanical Properties

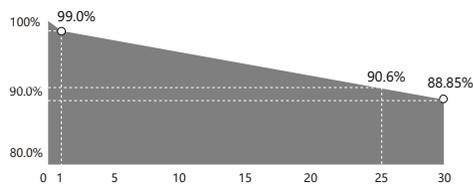
Number of Cells	96 pcs
Module Dimension	1762mm*1134mm*30mm
Weight	24.6kg
Front / Rear Glass	2.0mm/2.0mm Heat-strengthened glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 (3 diodes)
Length of Cable	4.0mm <sup>2</sup> , +1200mm/-1200mm (Cable length can be customized)
Country of Origin	China
Fire Rating	C
Packaging Configuration	37pcs/Pallet, 962pcs/40HQ Container

### Operating Properties

Operating Temperature	-40°C~+85°C*
Maximum System Voltage	1500V (IEC)
Maximum Series Fuse Rating	35A
Maximum Test Load	Front side 5400Pa, Rear side 2400Pa

\*T98(Max):70°C

### Linear Performance Warranty

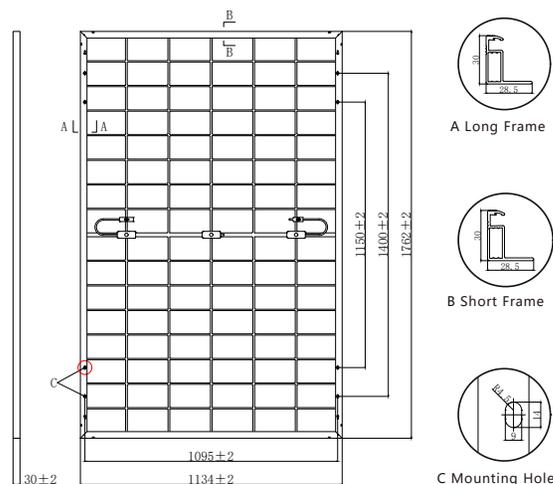


**1.00%**  
1st-year Degradation

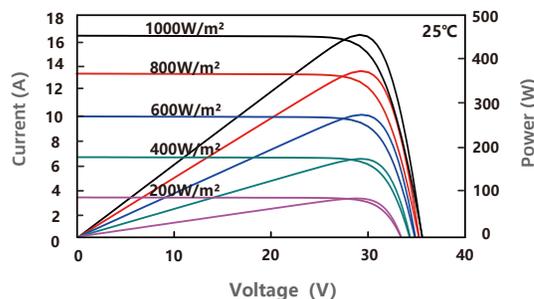
**0.35%**  
Annual Degradation

**15 Years Product Warranty**      **30 Years Performance Warranty**

### Engineering Drawing (unit: mm)



### Characteristic Curves JW-HD96J-R2-475



### Temperature Coefficient

Temperature Coefficient of Pmax	-0.260%/°C
Temperature Coefficient of Voc	-0.220%/°C
Temperature Coefficient of Isc	+0.05%/°C
Nominal Operating Cell Temperature	45±2°C

### Connector Model

Staubli: PV-KST4-EVO 2/xy UR, PV-KBT4-EVO 2/xy UR  
PV-KST4-EVO 2A/xy UR, PV-KBT4-EVO 2A/xy UR

Jolywood: JWC2xyzu      Renhe: RHC2xyzu  
Zhonghuan: PV-ZH202B      Xtong: PV-XT101.2

Version 2025.10 ©Jolywood (Taizhou) Solar Technology Co., Ltd. All rights reserved.  
\*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.