



REGIONE
LAZIO

COMUNE DI CELLERE (VT)

Progettazione della Centrale Solare "Energia dell'olio" da 88.200 kWp



Proponente:

PACIFICO

Pacifico Berillo s.r.l.

Piazza Walther-von-der-Vogelweide,8 - 39100 (BZ)

Investitore agricolo
superintensivo :

OXY CAPITAL
ADVISORS

OXY CAPITAL

Largo Donegani, 2 - 20121 Milano - Italia

Partner:



Titolo: Scheda tecnica moduli fotovoltaici - C.02

N° Elaborato: 100

**Progetto dell'inserimento paesaggistico
e mitigazione**

Progettista:

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Collaboratori:

Agr. Rosa Verde
Urb. Patrizia Ruggiero
Arch. Anna Sirica

Progettazione elettrica e civile

Progettista:

Ing. Rolando Roberto
Ing. Marco Balzano

Collaboratori:

Ing. Simone Bonacini
Ing. Giselle Roberto

Progettazione oliveto superintensivo

Progettista:

Agr. Giuseppe Rutigliano

Consulenza geologia

Geol. Gaetano Ciccarelli

Consulenza archeologia

Archeol. Claudia Concetta Costa

Consulenza irrigazione

Ing. Salvatore Scicchitano

Progettazione:



AEDES GROUP
ENGINEERING



MARE
RINNOVABILI

Cod: AD_15

Tipo di progetto:

- ☐ RILIEVO
☐ PRELIMINARE
☒ DEFINITIVO
☐ ESECUTIVO

Rev.	descrizione	data	formato	elaborato da	controllato da	approvato da
00		Novembre 2021	A4			
01	Nuova Consegna	Aprile 2023	A4			
02						

JW-HD132N

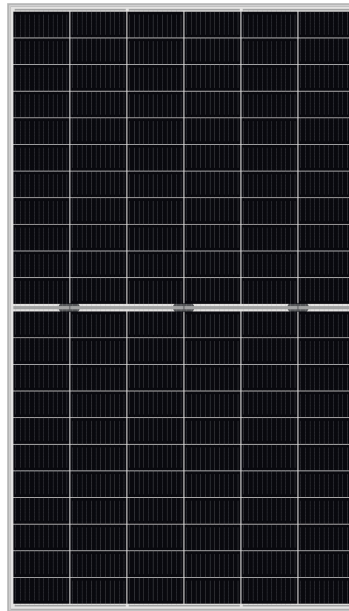
N-type
Bifacial Double Glass Mono Module

675-700W

Cell Type



12BB



700W

Maximum Power Output

22.53%

Maximum Module Efficiency

0~+5W

Power Output Tolerance



10-30% Additional Power Generation Gain

30 years lifespan brings 10-30% additional power generation comparing with conventional product



Better Weak Illumination Response

Wide spectral response, higher power output even under low-light settings like smog or cloudy days



ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally, can increase power generation



Better Temperature Coefficient

Higher power generation under working conditions, thanks to passivating contact cell technology



Lower LCOE

High bifaciality, high power output, saving BOS cost



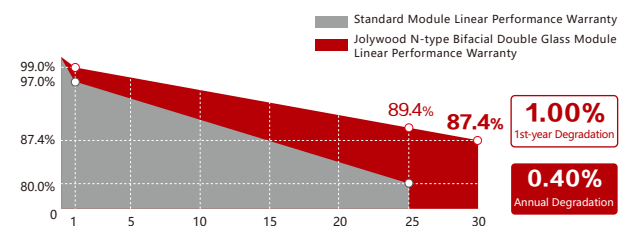
Wider Applicability

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



12 Years Product Material & Workmanship 30 Years Linear Performance Warranty

N-type Bifacial Double Glass Mono Module

Electrical Properties | STC*

Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	675	680	685	690	695	700
MPP Voltage (Vmp) (V)	38.6	38.8	39.0	39.2	39.4	39.5
MPP Current (Imp) (A)	17.50	17.54	17.58	17.62	17.66	17.73
Open Circuit Voltage (Voc) (V)	46.2	46.4	46.6	46.8	47.0	47.1
Short Circuit Current (Isc) (A)	18.57	18.62	18.67	18.72	18.76	18.82
Module Efficiency (%)	21.73	21.89	22.05	22.21	22.37	22.53

The data above is for reference only and the actual data is in accordance with the practical testing
Power Measurement Tolerance $\pm 3\%$

Electrical Properties | NOCT*

Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	511	514	518	522	526	530
MPP Voltage (Vmp) (V)	36.2	36.4	36.6	36.7	36.9	37.0
MPP Current (Imp) (A)	14.11	14.14	14.17	14.21	14.24	14.29
Open Circuit Voltage (Voc) (V)	44.2	44.3	44.5	44.7	44.9	45.0
Short Circuit Current (Isc) (A)	14.97	15.01	15.05	15.09	15.13	15.17

*NOCT: Irradiance at 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 (IEC)
Maximum Series Fuse Rating (A)	30
Power Tolerance	0 ~ +5W
Bifaciality*	75%

*Bifaciality= $P_{\text{maxrear}}(\text{STC}) / P_{\text{maxfront}}(\text{STC})$, Bifaciality tolerance: $\pm 5\%$

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

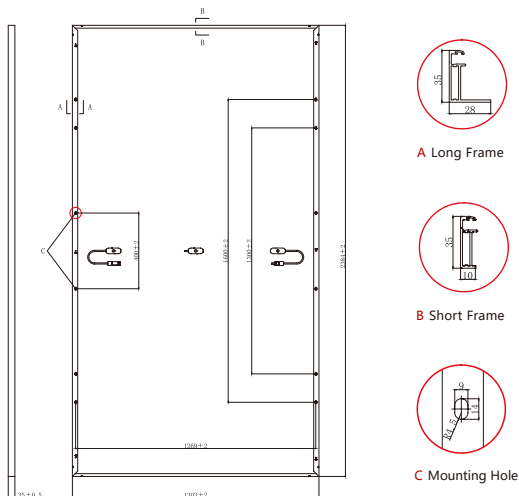
Cell Type	210.00mm*105.00mm
Number of Cells	132pcs(12*11)
Dimension	2384mm*1303mm*35mm
Weight	38kg
Front / Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium
Junction Box	IP68 (3 diodes)
Length of Cable*	4.0mm ² , +300mm/-180mm
Connector	MC4 Compatible

*Cable length can be customized

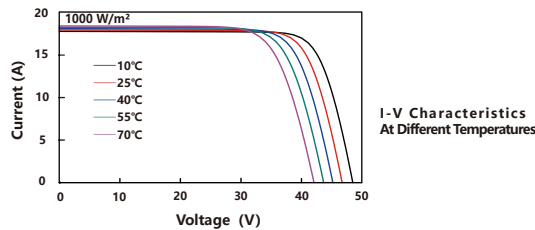
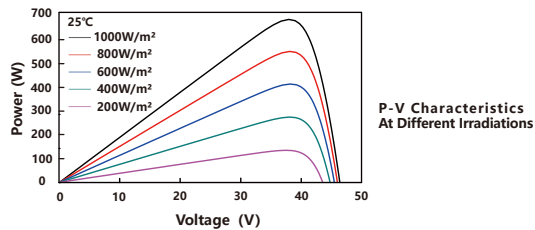
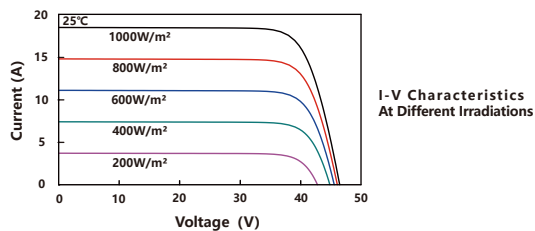
With Different Power Generation Gain (regarding 680W as an example)

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	734	38.8	18.93	46.4	20.09
15	762	38.8	19.62	46.4	20.83
20	789	38.8	20.31	46.4	21.56
25	816	38.8	21.00	46.4	22.30
30	843	38.9	21.70	46.5	23.03

Engineering Drawing (unit: mm)



Characteristic Curves | HD132N-680



Packaging Configuration

Packing Type	40'HQ
Piece/Pallet	31
Pallet/Container	18
Piece/Container	558

*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.

