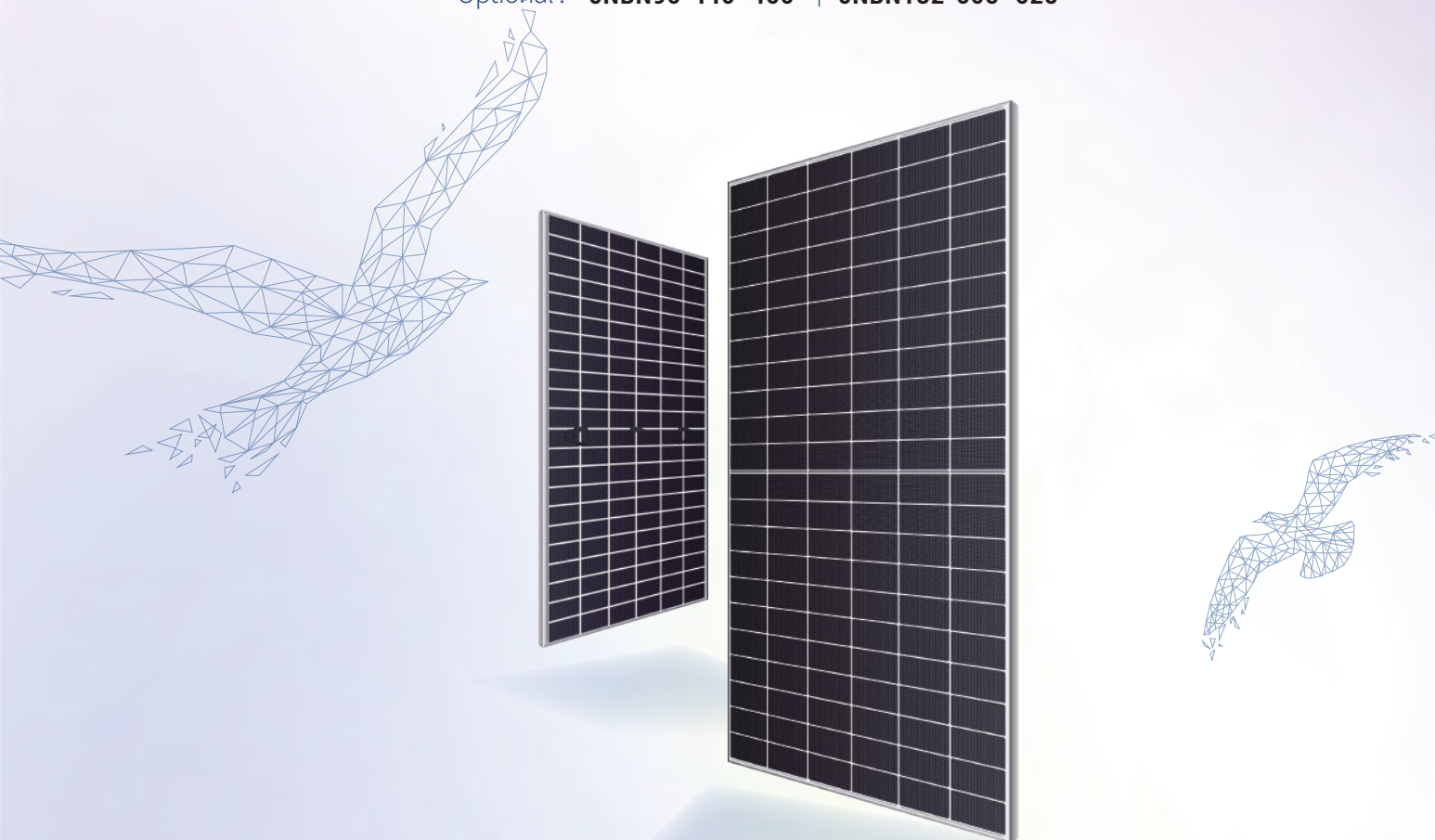




HIGH EFFICIENCY N-TOPCON BIFACIAL SOLAR MODULE

G12R Cell | 80% Bifacial Factor

Optional: **JNBN96-440~460** | **JNBN132-605~625**



High power, high reliability and bifacial power generation capability, suitable for diverse applications scenarios



Reduces the number of system modules and lowers BOS costs



Overseas transportation modules are placed horizontally to maximize space utilization



Optimized optical design enhances light conversion efficiency



12 years product warranty



30 years power generation warranty



a JINNENG HOLDING GROUP company

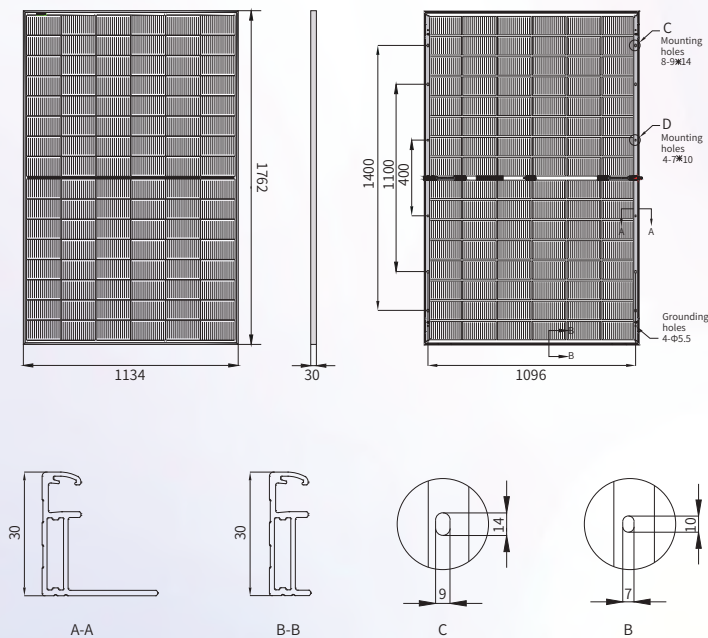
www.jinergy.com

JINNENG CLEAN ENERGY TECHNOLOGY LTD / JINNENG PHOTOVOLTAIC TECHNOLOGY CO. LTD

Bifacial Dual Glass TOPCon Module

JNBN96-440~460

ENGINEERING DRAWING



MECHANICAL PARAMETERS

Cell (mm)	182*105 TOPCon
Dimensions (L*W*H) (mm)	1762*1134*30
Weight (kg)	24.1
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	96(6*16)
No. of Diodes	3
Frame	Anodized Aluminium Alloy
Glass Thickness (mm)	2.0

QUALIFICATION

Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	35
Max.Wind Load/Max.Snow Load (Pa)	2400/5400
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68
Bifacial Factor(%)	80±5

TEMPERATURE COEFFICIENTS

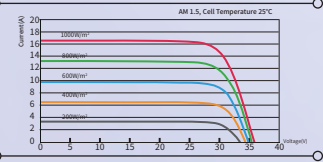
Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.25 %/°C
Temperature Coefficient Current (Isc)	0.045 %/°C
Temperature Coefficient Power (Pm)	-0.29 %/°C

ELECTRICAL PARAMETERS

Module Type	(1500V DC)	JNBN96-440	JNBN96-445	JNBN96-450	JNBN96-455	JNBN96-460
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	440	445	450	455	460
	Output Tolerance (W)	0~+5	0~+5	0~+5	0~+5	0~+5
	Max. Power Voltage (Vmp/V)	28.48	28.65	28.82	28.99	29.16
	Max. Power Current (Imp/A)	15.46	15.54	15.62	15.70	15.78
	Open Circuit Voltage (Voc/V)	35.23	35.40	35.57	35.74	35.91
	Short Circuit Current (Isc/A)	16.16	16.24	16.32	16.40	16.48
	Module Efficiency (%)	22.02	22.27	22.52	22.77	23.02
BNPI AM1.5 front 1000W/m ² rear 135W/m ² Cell Temperature 25°C	Max. Power (Pmpp/W)	487.5	493.1	498.6	504.1	509.7
	Max. Power Voltage (Vmp/V)	28.48	28.65	28.82	28.99	29.16
	Max. Power Current (Imp/A)	17.13	17.22	17.31	17.40	17.48
	Open Circuit Voltage (Voc/V)	35.23	35.40	35.57	35.74	35.91
	Short Circuit Current (Isc/A)	17.91	17.99	18.08	18.17	18.26
	Module Efficiency (%)	24.40	24.68	24.95	25.23	25.51

*Measurement tolerance: Pmax:±3%, Voc:±3%, Isc: ±5%.

I-V CURVE (450W)



PACKING CONFIGURATION

Pieces Per Pallet	36
Pallets Per Container	26
Pieces Per Container	936

DEFAULT

OPTIONAL

Connector Type	☐ MC4 Compatible	☐ MC4
Cable Length	☐ 350mm/280mm	☐ Customized
Frame Color	☐ Silver	☐ Black



TUV: IEC/EN 61215, IEC/EN 61730
GB/T 19001-2016/ ISO 9001:2015
GB/T 24001-2016/ ISO 14001:2015
GB/T 45001-2020/ ISO 45001:2018
CNAS-CL01: ISO/IEC 17025:2017

CAUTION: The electrical parameters in this product datasheet do not refer to only one module. Read safety and installation instructions before using the product. The contents of this specification are for reference only and are subject to change without notice. Jinerger reserves the right of final interpretation.
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12-year Product materials and workmanship quality warranty

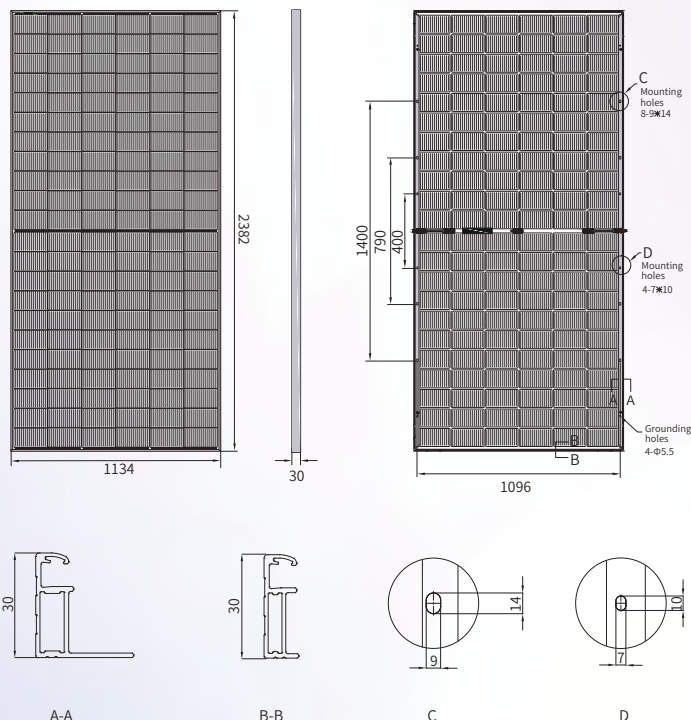
Output power		
The 1st year	The 12th year	The 30th year
≥99.00%	≥94.60%	≥87.40%



Bifacial Dual Glass TOPCon Module

JNBN132 – 605~625

ENGINEERING DRAWING



MECHANICAL PARAMETERS

Cell (mm)	182*105 TOPCon
Dimensions (L*W*H) (mm)	2382*1134*30
Weight (kg)	32.6
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	132(6*22)
No. of Diodes	3
Frame	Anodized Aluminium Alloy
Glass Thickness (mm)	2.0

QUALIFICATION

Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	35
Max.Wind Load/Max.Snow Load (Pa)	2400/5400
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68
Bifacial Factor(%)	80±5

TEMPERATURE COEFFICIENTS

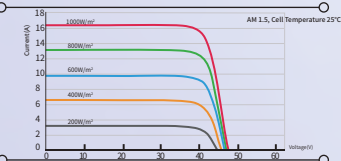
Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.25 %/°C
Temperature Coefficient Current (Isc)	0.045 %/°C
Temperature Coefficient Power (Pm)	-0.29 %/°C

ELECTRICAL PARAMETERS

Module Type	(1500V DC)	JNBN132-605	JNBN132-610	JNBN132-615	JNBN132-620	JNBN132-625
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	605	610	615	620	625
	Output Tolerance (W)	0~+5	0~+5	0~+5	0~+5	0~+5
	Max. Power Voltage (Vmp/V)	38.89	39.06	39.23	39.40	39.57
	Max. Power Current (Imp/A)	15.56	15.62	15.68	15.74	15.80
	Open Circuit Voltage (Voc/V)	47.83	48.00	48.17	48.34	48.51
	Short Circuit Current (Isc/A)	16.27	16.33	16.39	16.45	16.51
	Module Efficiency (%)	22.40	22.58	22.77	22.95	23.14
BNPI AM1.5 front 1000W/m ² rear 135W/m ² Cell Temperature 25°C	Max. Power (Pmpp/W)	670	676	680	685	691
	Max. Power Voltage (Vmp/V)	38.89	39.06	39.23	39.40	39.57
	Max. Power Current (Imp/A)	17.24	17.31	17.33	17.40	17.46
	Open Circuit Voltage (Voc/V)	47.83	48.00	48.17	48.34	48.51
	Short Circuit Current (Isc/A)	18.03	18.09	18.12	18.18	18.25
	Module Efficiency (%)	24.82	25.02	25.17	25.37	25.57

*Measurement tolerance: Pmax: ±3%, Voc: ±3%, Isc: ±5%.

I-V CURVE (615W)



PACKING CONFIGURATION

Pieces Per Pallet	36
Pallets Per Container	20
Pieces Per Container	720

DEFAULT

Connector Type	☐ MC4 Compatible	☐ MC4
Cable Length	☐ 350mm/280mm	☐ Customized
Frame Color	☐ Silver	☐ Black

OPTIONAL

TUV: IEC/EN 61215, IEC/EN 61730
GB/T 19001-2016/ ISO 9001:2015
GB/T 24001-2016/ ISO 14001:2015
GB/T 45001-2020/ ISO 45001:2018
CNAS-CL01: ISO/IEC 17025:2017

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12-year Product materials and workmanship quality warranty

Output power

The 1st year	The 12th year	The 30th year
≥99.00%	≥94.60%	≥87.40%

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