



HIGH EFFICIENCY N-TOPCON SOLAR MODULE




M10 Cell | SMBB | Half-cut | Optional Bifacial

Optional: JNMN108-435~455 | JNMN144-585~605

JNBN108-425~445 | JNBN144-580~600 | JNBN156-625~645



HIGHER EFFICIENCY N-TYPE CELLS & IMPROVED RELIABILITY

-  Lower LID and LeTID ensure long-term returns.
-  Non-destructive cutting with ultra-high-precision welding
Improve module efficiency and reliability.
-  SMBB metallization technology reduces series resistance losses and improves module reliability.

 12 year product warranty  30 year power generation warranty



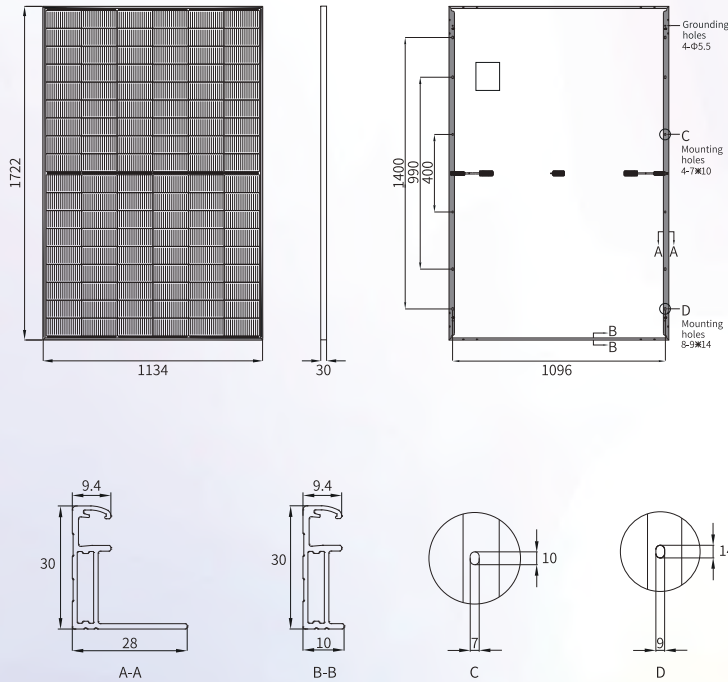
 a JINNENG HOLDING GROUP company

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

Monofacial Single Glass TOPCon Module

JNMN108-435-455

ENGINEERING DRAWING



MECHANICAL PARAMETERS

Cell (mm)	182.2*91.875 TOPCon
Dimensions (L*W*H) (mm)	1722*1134*30
Weight (kg)	21.0
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	108(6*18)
No. of Diodes	3
Frame	Anodized Aluminium Alloy
Glass Thickness (mm)	3.2

QUALIFICATION

Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	25
Max.Wind Load/Max.Snow Load (Pa)	2400/5400
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68

TEMPERATURE COEFFICIENTS

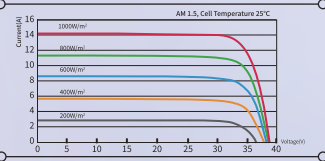
Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.25 %/°C
Temperature Coefficient Current (Isc)	0.045 %/°C
Temperature Coefficient Power (Pm)	-0.29 %/°C

ELECTRICAL PARAMETERS

Module Type (1500V DC)	JNMN108-435	JNMN108-440	JNMN108-445	JNMN108-450	JNMN108-455	
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	435	440	445	450	455
	Output Tolerance (W)	0-+5	0-+5	0-+5	0-+5	0-+5
	Max. Power Voltage (Vmp/V)	32.31	32.52	32.72	32.92	33.11
	Max. Power Current (Imp/A)	13.47	13.54	13.61	13.68	13.75
	Open Circuit Voltage (Voc/V)	38.64	38.78	38.92	39.06	39.20
	Short Circuit Current (Isc/A)	14.14	14.22	14.30	14.38	14.46
	Module Efficiency (%)	22.28	22.53	22.79	23.04	23.30
NMOT AM1.5 800W/m ² Ambient Temperature 20°C Wind Speed 1m/s	Max. Power (Pmpp/W)	331.9	335.7	339.5	343.3	347.1
	Max. Power Voltage (Vmp/V)	30.80	30.99	31.18	31.37	31.56
	Max. Power Current (Imp/A)	10.78	10.83	10.89	10.94	11.00
	Open Circuit Voltage (Voc/V)	36.72	36.86	36.99	37.12	37.26
	Short Circuit Current (Isc/A)	11.39	11.46	11.52	11.59	11.65

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

I-V CURVE (445W)



PACKING CONFIGURATION

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

DEFAULT

OPTIONAL

Connector Type	<input type="checkbox"/> MC4 Compatible	<input type="checkbox"/> MC4
Cable Length	<input type="checkbox"/> 350mm/280mm	<input type="checkbox"/> Customized
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> 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

12-year Product materials and workmanship quality warranty

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

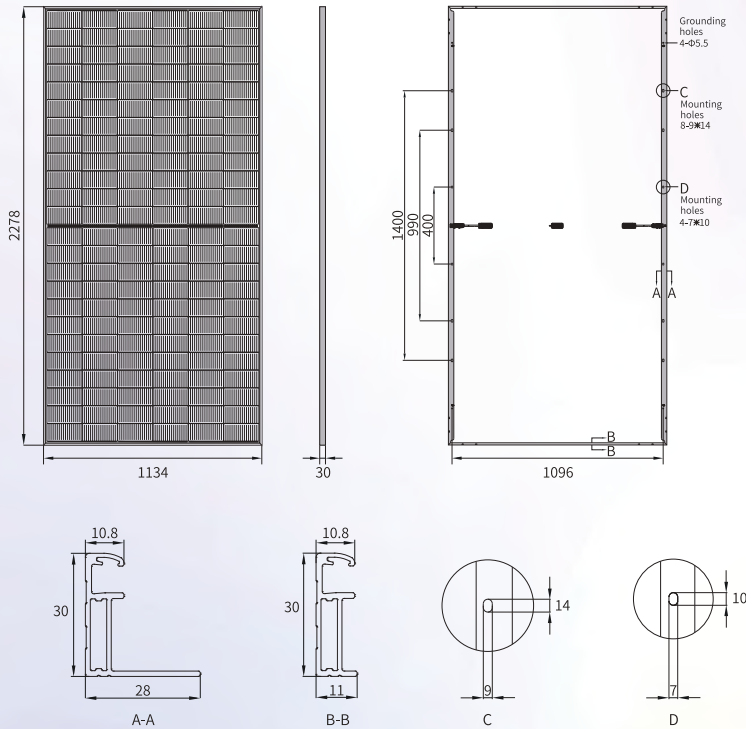
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Monofacial Single Glass TOPCon Module

JNMN144-585-605

ENGINEERING DRAWING



MECHANICAL PARAMETERS

Cell (mm)	182.2*91.875 TOPCon
Dimensions (L*W*H) (mm)	2278*1134*30
Weight (kg)	27.1
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	144(6*24)
No. of Diodes	3
Frame	Anodized Aluminium Alloy
Glass Thickness (mm)	3.2

QUALIFICATION

Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	25
Max.Wind Load/Max.Snow Load (Pa)	2400/5400
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68

TEMPERATURE COEFFICIENTS

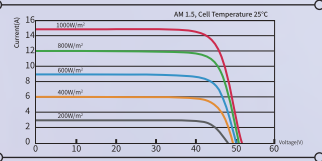
Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.25 %/°C
Temperature Coefficient Current (Isc)	0.045 %/°C
Temperature Coefficient Power (Pm)	-0.29 %/°C

ELECTRICAL PARAMETERS

Module Type (1500V DC)	JNMN144-585	JNMN144-590	JNMN144-595	JNMN144-600	JNMN144-605	
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	585	590	595	600	605
	Output Tolerance (W)	0+5	0+5	0+5	0+5	0+5
	Max. Power Voltage (Vmp/V)	42.65	42.80	42.95	43.10	43.25
	Max. Power Current (Imp/A)	13.72	13.79	13.86	13.93	14.00
	Open Circuit Voltage (Voc/V)	51.12	51.26	51.40	51.54	51.68
	Short Circuit Current (Isc/A)	14.38	14.46	14.54	14.62	14.70
NMOT AM1.5 800W/m ² Ambient Temperature 20°C Wind Speed 1m/s	Module Efficiency (%)	22.65	22.84	23.03	23.23	23.42
	Max. Power (Pmpp/W)	446.3	450.1	453.9	457.7	461.5
	Max. Power Voltage (Vmp/V)	40.66	40.80	40.94	41.07	41.21
	Max. Power Current (Imp/A)	10.98	11.03	11.09	11.14	11.20
	Open Circuit Voltage (Voc/V)	48.58	48.72	48.85	48.98	49.12
	Short Circuit Current (Isc/A)	11.59	11.65	11.72	11.78	11.84

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

I-V CURVE (595W)



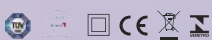
PACKING CONFIGURATION

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

DEFAULT

OPTIONAL

Connector Type	<input type="checkbox"/> MC4 Compatible	<input type="checkbox"/> MC4
Cable Length	<input type="checkbox"/> 350mm/280mm	<input type="checkbox"/> Customized
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black



TUV: IEC/EN 61215, IEC/EN 61730
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Output power		
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