TRANSFORMING THE POWER OF SUN

JAKSON

TOPCon N-Type

NEXT GEN BIFACIAL SOLAR PV MODULE 565-580 Wp

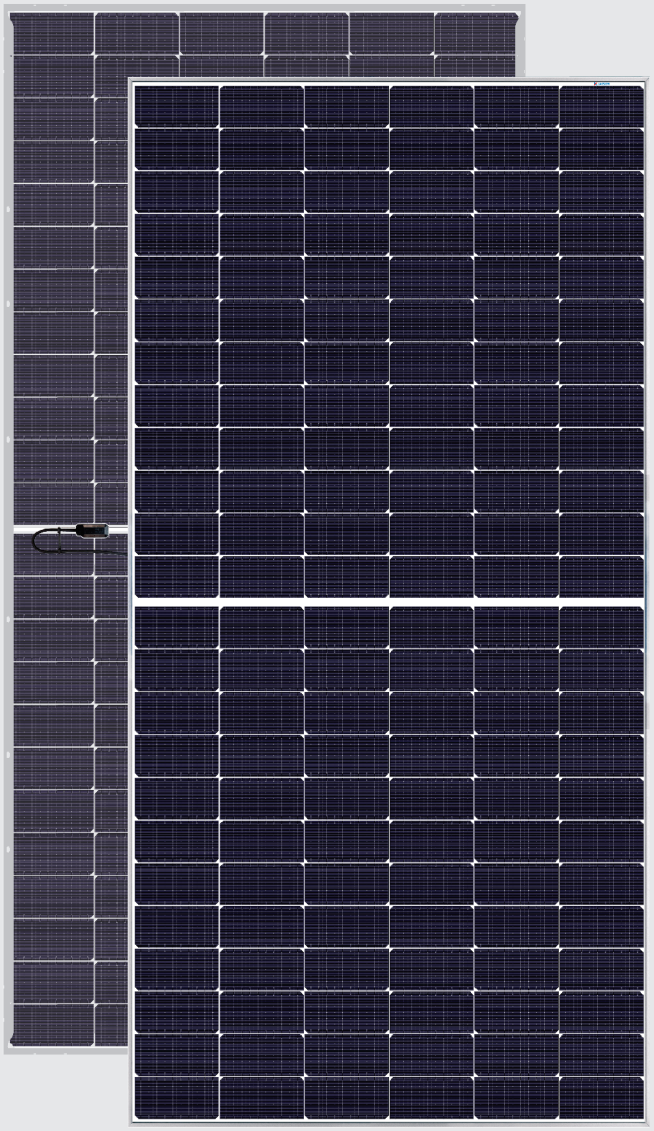
Best in Class Efficiency 22.47%

MBB Technology M10 Half Cut (144 Cells)
Bifacial Module with Transparent Backsheet

Latest Water-less
Non-Destructive Cell Cutting (NDC)

FEATURES

- **Lower LID & Per Year Degradation** - Enhanced Power Generation Using TOPCon Technology
- **Better Rear Power Gain -** Higher Bifaciality Factor of 80±5%
- **Improved Temperature Coefficients as compared to conventional P-Type module –** Better Generation at Higher Temperature
- **Half Cut Cell Design** - Excellent Performance Under Partial Shading Conditions
- **Lower LCOE & Faster ROI** – Higher Bifaciality, Lower BOS Cost
- **Excellent Module Performance** - Reduced Resistive Loss with MBB Technology
- Manufactured in Fully Automatic Production Line - 100% Inline Hi-Pot and EL Testing at 3 Stages
- **Meeting Highest Quality Standards** - Manufactured Using Certified Tier 1 BOM
- **Excellent Performance Under Low Light** – Higher Power Output on Cloudy or Foggy Days
- Bifacial gain of **Up To 25% with Transparent Backsheet Module,** capable of energy generation with both direct and reflected sunlight.



Approvals and Certificates:

*IEC 61215, IEC 61730 (I & II), IEC 61853, IEC 62804, IEC 60068, IEC 61701, IEC 62716, IS 14286 (BIS), UL 61730, CEC, ISO 9001:2015, 14001:2015, 45001:2018 certified

* Under Process

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TOPCon SOLAR PV MODULES WITH TRANSPARENT BACKSHEET

565-580Wp

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ELECTRICAL DATA - STC* & NOCT**

Model	Unit	JN-565BT		JN-570BT		JN-575BT		JN-580BT	
Parameters		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Capacity Rating Wp	Pmax	565	425	570	429	575	432	580	436
Max. Power Voltage in V	Vpm	42.50	39.86	42.67	40.01	42.85	40.16	42.94	40.20
Max. Power Current in A	Ipm	13.30	10.66	13.36	10.71	13.42	10.77	13.51	10.85
Open Circuit Voltage in V	Voc	50.82	48.27	51.01	48.45	51.20	48.63	51.42	48.84
Short Circuit Current in A	Isc	14.12	11.40	14.19	11.45	14.25	11.50	14.36	11.59
Module Efficiency	%	21.89		22.08		22.28		22.47	
Power Tolerance	Wp	-0/+4.99							

*STC: Irradiance 1000 W/m^2, cell temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m^2 according to EN 60904-1. Measurement uncertainty ±3%

**NOCT irradiance 800 W/m^2, ambient temperature 20°C, wind speed 1 m/sec.

BI-FACIAL OUTPUT - REARSIDE POWER GAIN*

		JN-565BT	JN-570BT	JN-575BT	JN-580BT
10%	Power Output (W)	622	627	633	638
	Module Efficiency (%)	24.10	24.29	24.53	24.72
15%	Power Output (W)	650	656	661	667
	Module Efficiency (%)	25.18	25.40	25.61	25.84
20%	Power Output (W)	678	684	690	696
	Module Efficiency (%)	26.27	26.50	26.73	26.97
25%	Power Output (W)	706	713	719	725
	Module Efficiency (%)	27.35	27.63	27.86	28.09
Bifaciality Factor		80±5%			

*Bifaciality gain is dependent on various factors (Ground Reflectance, Tilt Angle, Location, etc.)

MECHANICAL DATA

Dimensions (L x W x H)	2278 mm x 1133 mm x 35 mm (optional 40 mm)
Weight	29 kgs
Junction Box	Split JB, IP 68 with 3 bypass diodes
Cable	Solar Cable 4.0 mm², 400 mm (Higher cable option available on request)
Front Superstrate	3.2 mm, High Transmission, AR coated tempered glass
Solar Cells	N-Type TOPCon - M10 (144 pcs Half Cut)
Cell Encapsulation	PID & UV Resistant
Back Substrate	Transparent Backsheet
Frame	Anodized Aluminium Alloy
Mechanical Load Strength	5400 Pa (Snow Load), 2400 Pa (Wind Load)

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	45°C (±2°C)
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Pmax	-0.3%/°C

PERMISSIBLE OPERATING CONDITIONS

Temperature Range	-40°C to +85°C
Maximum System Voltage	1500 V DC
Max. Series Fuse Rating	30 A

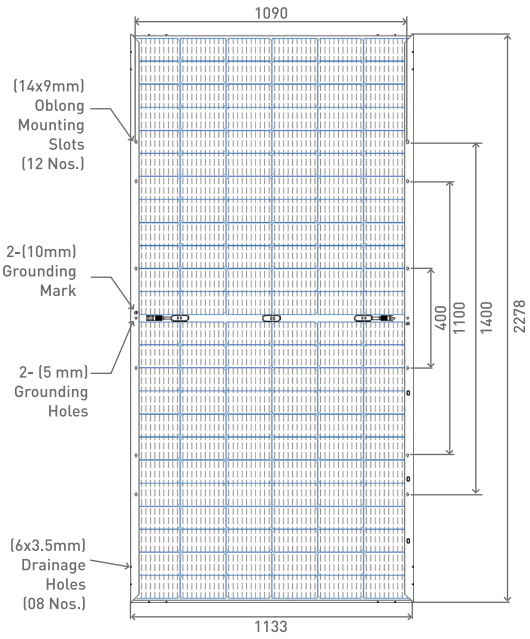
WARRANTY AND CERTIFICATIONS

Product Warranty	12 years Product Warranty
Performance Guarantee	25 year Linear Performance Warranty

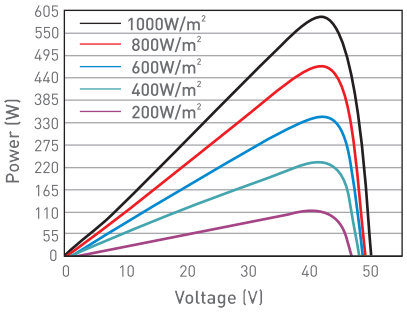
PACKAGING CONFIGURATION

Container Size	40' HQ
Modules per Pallet	31
Modules per Container	620

Dimension of PV Module
Unit: mm



Power-Voltage Curve



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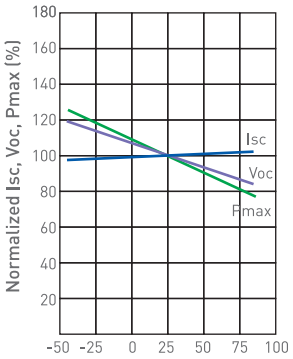
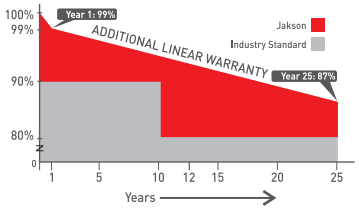


Linear Performance Warranty



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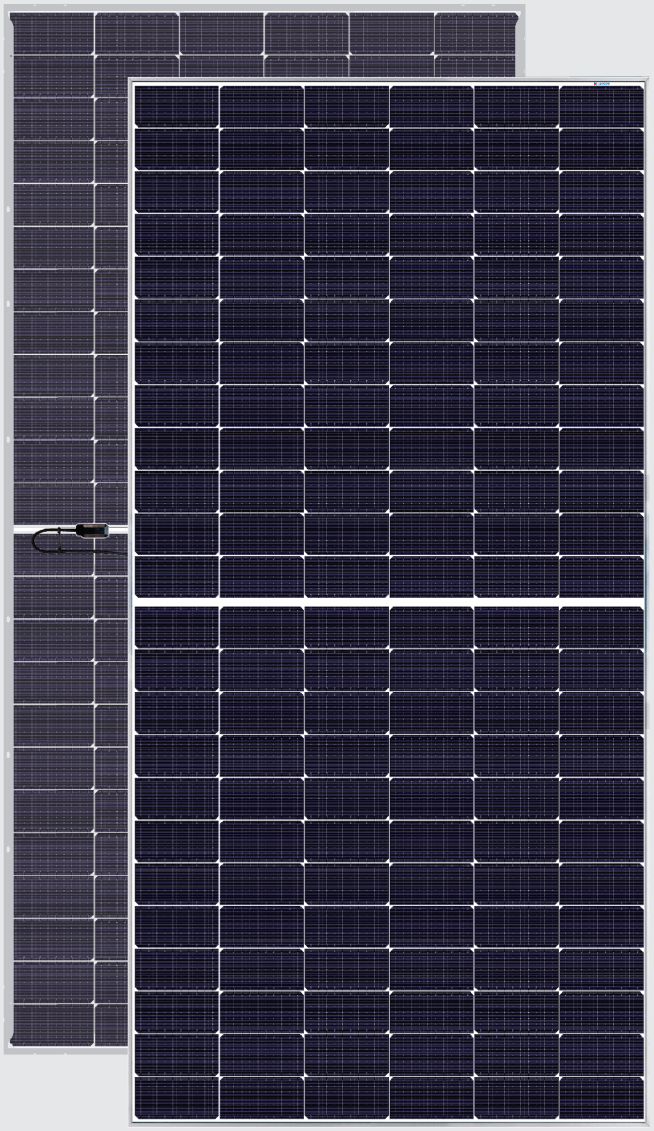

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565-580Wp

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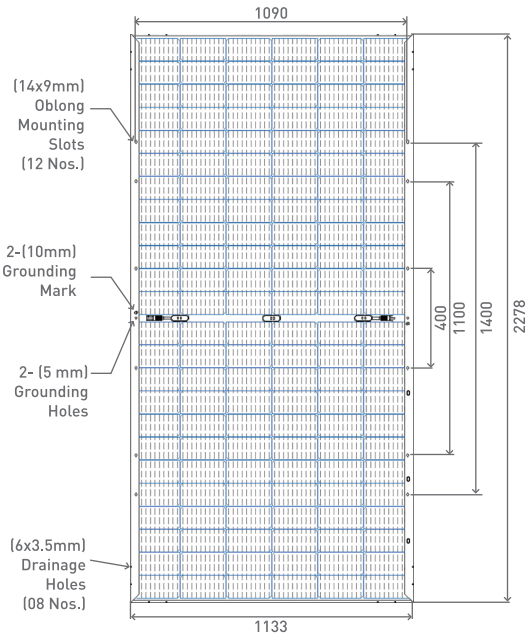

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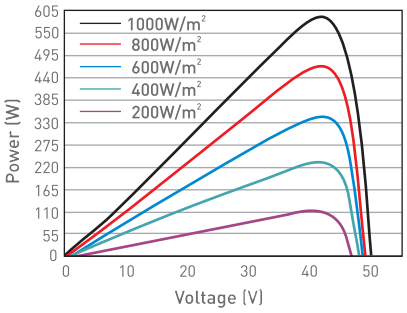

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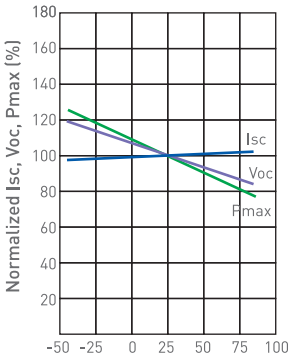

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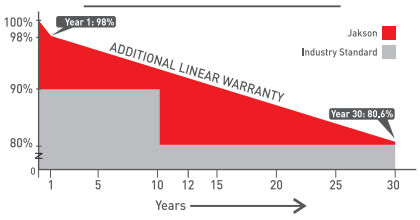

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