

TRANSFORMING THE POWER OF SUN



NEXT GEN **TOPCON** BIFACIAL SOLAR PV MODULE 575-590 Wp DUAL GLASS

Best in Class Efficiency **22.86%**

High Efficiency **N-Type TOPCon** Cells
Bifacial Module with Dual Glass

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 Technology - 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 Dual Glass 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



**TOPCON SOLAR PV MODULES
WITH DUAL GLASS**

575-590Wp



ELECTRICAL DATA - STC* & NOCT**

Model	Unit	JN-575G		JN-580G		JN-585G		JN-590G	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Capacity rating Wp	Pmax	575	432	580	436	585	440	590	443
Max. Power Voltage in V	Vmp	42.85	40.16	42.97	40.20	43.11	40.35	43.26	40.47
Max. Power Current in A	Imp	13.43	10.77	13.50	10.85	13.57	10.91	13.64	10.97
Open Circuit Voltage in V	Voc	51.12	48.63	51.27	48.84	51.42	49.02	51.57	49.21
Short Circuit Current in A	Isc	14.24	11.50	14.30	11.59	14.36	11.64	14.42	11.70
Module Efficiency	%	22.28		22.47		22.67		22.86	
Power Tolerance	Wp	-0/+4.99							

*STC: Irradiance 1000 W/m², cell temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m² according to EN 60904-1. Measurement uncertainty ±3%

**NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec.

BI-FACIAL OUTPUT - REAR SIDE POWER GAIN*

		JN-575G	JN-580G	JN-585G	JN-590G
10%	Power Output (W)	633	638	644	649
	Module Efficiency (%)	24.53	24.72	24.95	25.15
15%	Power Output (W)	661	667	673	679
	Module Efficiency (%)	25.61	25.84	26.08	26.31
20%	Power Output (W)	690	696	702	708
	Module Efficiency (%)	26.73	26.97	27.20	27.43
25%	Power Output (W)	719	725	731	738
	Module Efficiency (%)	27.86	28.09	28.32	28.59
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)	MM: 2278 x 1133 x 35 IN: 89.68 x 44.60 x 1.37
Weight	33 kgs 72.75 lbs
Junction Box	Split JB, IP 68 with 3 bypass diodes
Cable	Solar Cable 4.0 mm ² / 0.006 in ² , 400 mm / 15.75 in (Higher cable option available on request)
Front Superstrate	2.0 mm / 0.079 in, High Transmission, AR coated
Solar Cells	N-Type TOPCon - M10 (144 pcs Half Cut)
Cell Encapsulation	PID & UV Resistant Coextruded (POE)
Back Substrate	2.0 mm / 0.079 in, Heat Strengthened Glass (Optional White Grid)
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

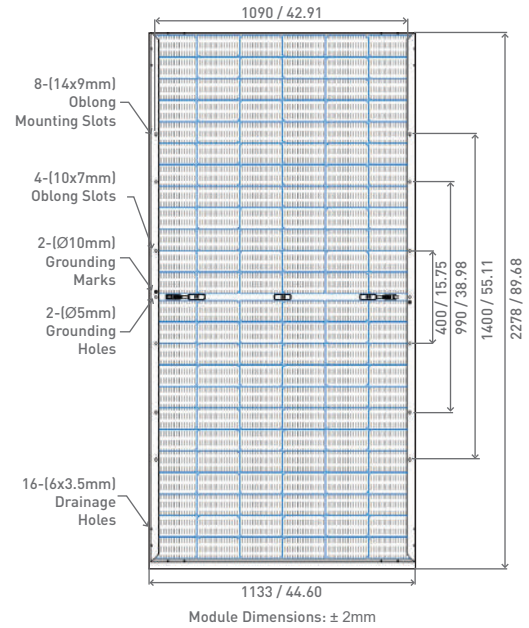
WARRANTY AND CERTIFICATIONS

Product Warranty	12 years Product Warranty
Performance Guarantee	30 year Linear Performance Warranty

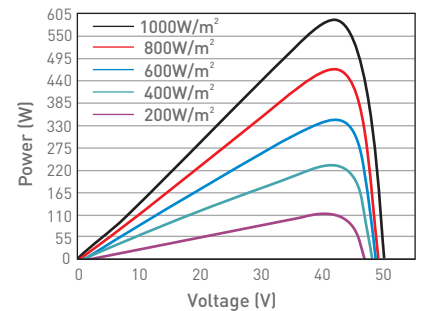
PACKAGING CONFIGURATION

	40' HQ	32' HQ
Modules per Pallet	31	31
Modules per Container	620	496

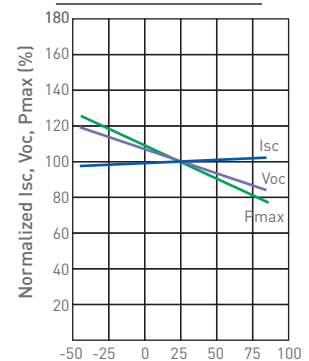
Dimension of PV Module
Unit: mm / in



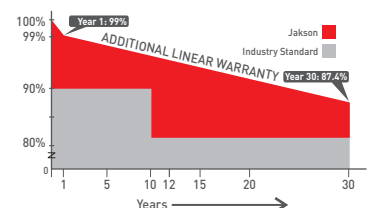
Power-Voltage Curve



Cell Temperature (°C)



Linear Performance Warranty



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Product specifications are subject to change without notice
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