

TRANSFORMING THE POWER OF SUN



NEXT GEN **TOPCON** BIFACIAL SOLAR PV MODULE 585-600 Wp DUAL GLASS

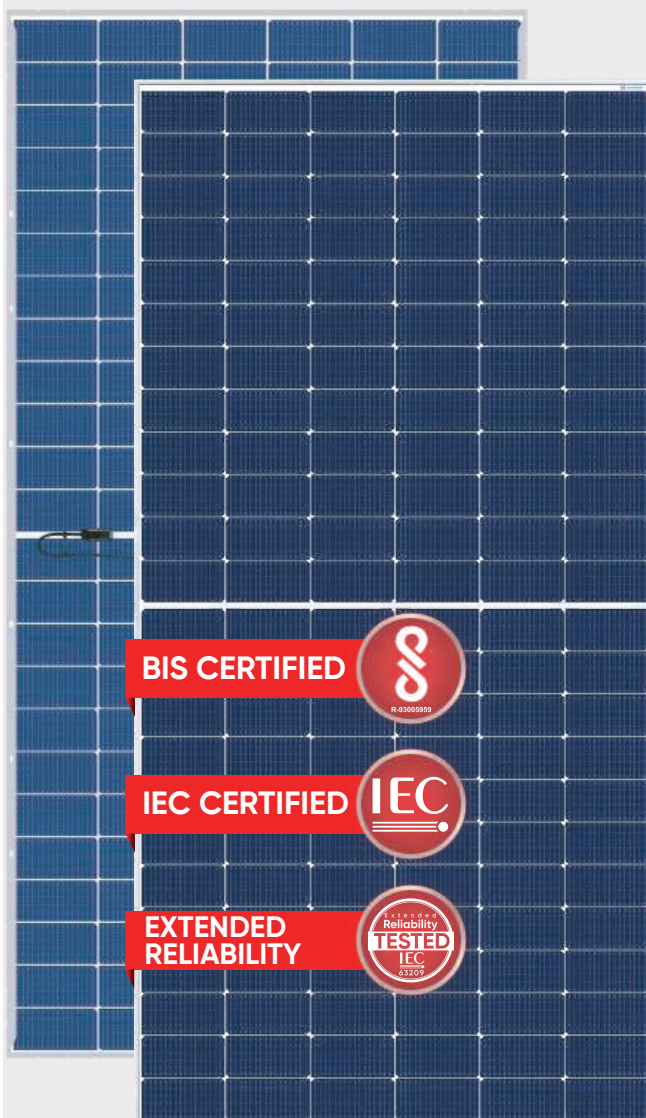
Best in Class Efficiency **23.25%**

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, IEC 63209, IS 14286 (BIS), ISO 9001:2015, 14001:2015, 45001:2018 certified





TOPCON SOLAR PV MODULES WITH DUAL GLASS

585-600Wp



ELECTRICAL DATA - STC* & NOCT**

Model	Unit	JN-585G		JN-590G		JN-595G		JN-600G	
Parameters		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Capacity rating Wp	Pmax	585	442	590	446	595	450	600	454
Max. Power Voltage in V	Vmp	44.09	41.52	44.23	41.65	44.37	41.78	44.52	41.92
Max. Power Current in A	Imp	13.27	10.65	13.34	10.71	13.41	10.76	13.48	10.82
Open Circuit Voltage in V	Voc	52.57	50.01	52.72	50.16	52.88	50.31	53.03	50.45
Short Circuit Current in A	Isc	14.05	11.24	14.10	11.28	14.16	11.33	14.22	11.38
Module Efficiency	%	22.67		22.86		23.05		23.25	
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-585G	JN-590G	JN-595G	JN-600G
10%	Power Output (W)	644	649	655	660
	Module Efficiency (%)	24.95	25.15	25.38	25.57
15%	Power Output (W)	673	679	684	690
	Module Efficiency (%)	26.08	26.31	26.50	26.73
20%	Power Output (W)	702	708	714	720
	Module Efficiency (%)	27.20	27.43	27.66	27.90
25%	Power Output (W)	731	738	744	750
	Module Efficiency (%)	28.32	28.59	28.83	29.06
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	32 kgs 70.55 lbs (±2%)
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(β)	-0.25%/°C
Temperature Coefficient of Isc(α)	0.046%/°C
Temperature Coefficient of Pmax(γ)	-0.30%/°C

PERMISSIBLE OPERATING CONDITIONS

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

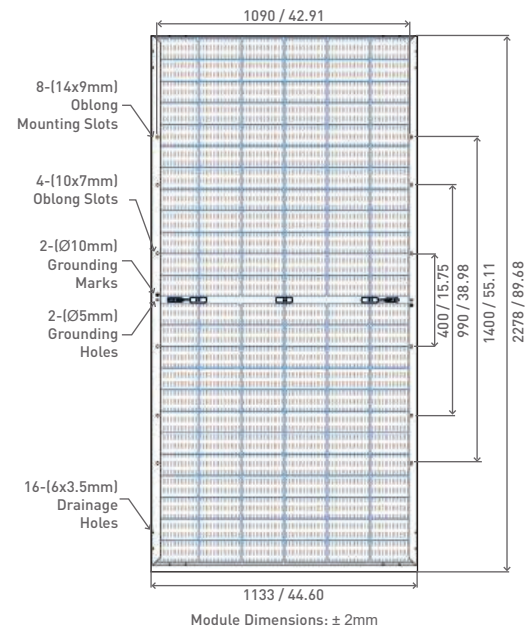
WARRANTY AND CERTIFICATIONS

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

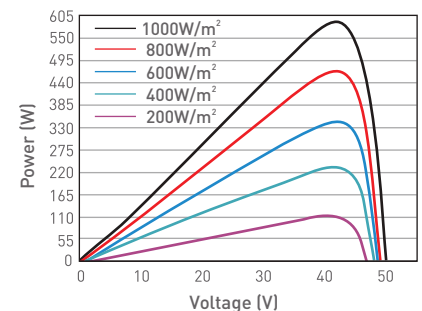
PACKAGING CONFIGURATION

Vehicle Type	32FT	40FT
Module per Pallet	28	28
Module per Vehicle	420	560

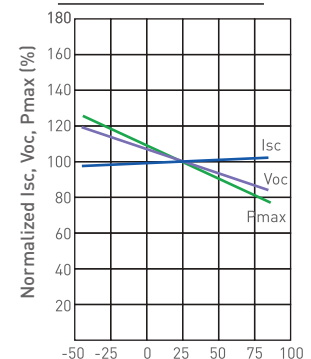
Dimension of PV Module
Unit: mm / in



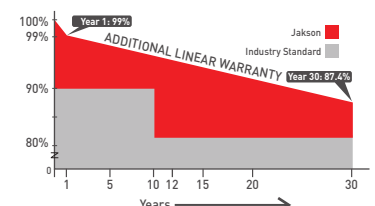
Power-Voltage Curve



Cell Temperature (°C)



Linear Performance Warranty



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