

TRANSFORMING THE POWER OF SUN



TOPCon N-Type

NEXT GEN BIFACIAL SOLAR PV MODULE 575-590 Wp

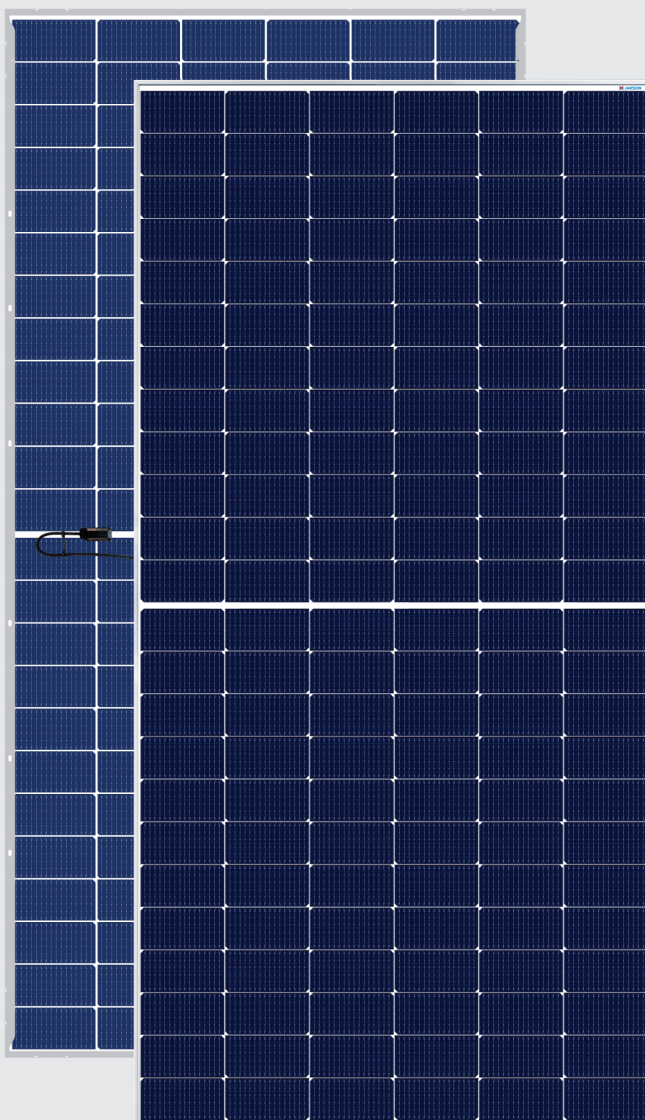
Best in Class Efficiency **22.86%**

MBB Technology **M10 Half Cut (144 Cells)**
Bifacial Module with Dual Glass (White Grid)

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 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

ELECTRICAL DATA - STC* & NOCT**

Model	Unit	JN-575GW		JN-580GW		JN-585GW		JN-590GW	
Parameters		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	Vpm	42.85	40.16	42.94	40.20	43.12	40.35	43.27	40.47
Max. Power Current in A	Ipm	13.42	10.77	13.51	10.85	13.57	10.91	13.64	10.97
Open Circuit Voltage in V	Voc	51.20	48.63	51.42	48.84	51.61	49.02	51.81	49.21
Short Circuit Current in A	Isc	14.25	11.50	14.36	11.59	14.43	11.64	14.50	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-575GW	JN-580GW	JN-585GW	JN-590GW
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%			

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
Back Substrate	2.0 mm / 0.079 in, Heat Strengthened Glass with 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

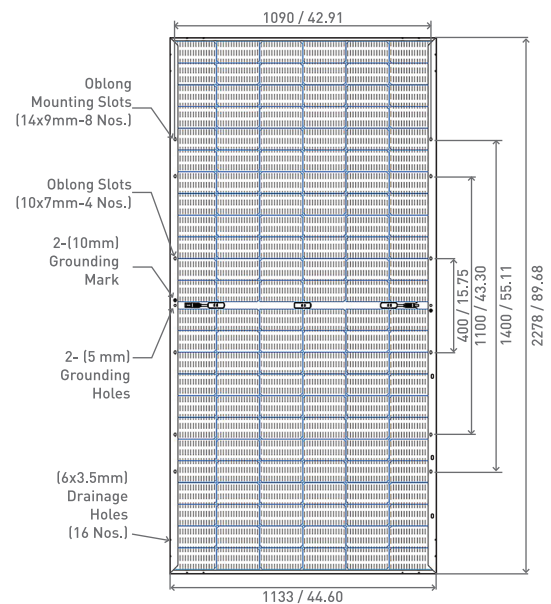
WARRANTY AND CERTIFICATIONS

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

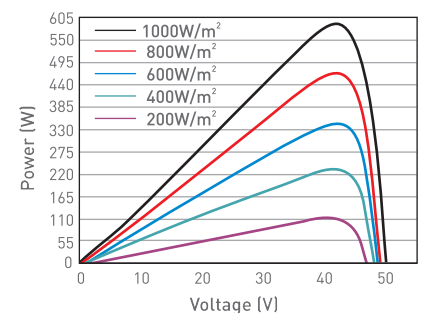
PACKAGING CONFIGURATION

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

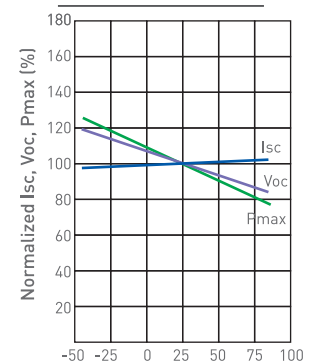
Dimension of PV Module
Unit: mm / in



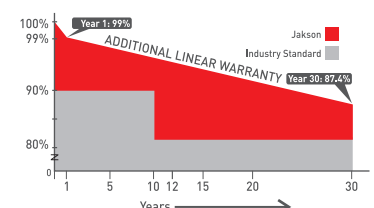
Power-Voltage Curve



Cell Temperature (°C)



Linear Performance Warranty



JAKSON ENGINEERS LIMITED

A-43, Phase-II Extn., Hosiery Complex, Noida-201305, U.P., India

Tel.: +91-120-4302600, 4526100 | Toll Free No. : 1800 103 2600

E-mail: customer.support@jakson.com ; solar-bu@jakson.com | www.jakson.com