

# TRANSFORMING THE POWER OF SUN













## NEXT GEN SOLAR PV MODULE 540-555 Wp

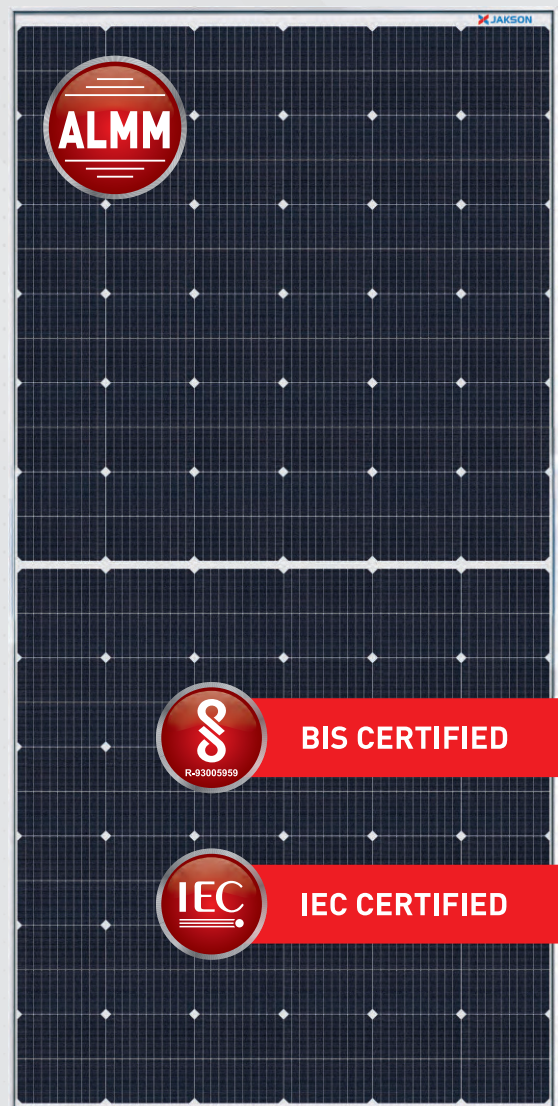
Best in Class Efficiency **21.50%**

MBB Technology **M10 Half Cut Cells**

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

### FEATURES

-  Low LID Degradation using PERC Technology - Enhanced Power Generation During its Life Cycle
-  Improved Temperature Coefficients - Better Generation at Higher Temperature
-  Reduced Resistive Loss with MBB Technology - Excellent Module Performance
-  Half Cut Cell Design - Excellent Performance Under Partial Shading Conditions
-  Lower LCOE (Levelized Cost of Electricity) - Faster Return on Investment (ROI)
-  Manufactured in Fully Automatic Production Line
-  100% in line Hi-Pot testing, 100% EL Testing at 3 stages – Stringer, In process and Final Testing
-  Manufactured using certified Tier 1 BOM Meeting Highest Quality Standards
-  Certified for Pollution Degree II, Salt Mist Resistant (Severity 6), Ammonia & PID Resistant
-  Better reliability under Extreme Environmental Conditions



#### Approvals and Certificates:

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



## ELECTRICAL DATA - STC\* & NOCT\*\*

Model	Unit	JH-540M		JH-545M		JH-550M		JH-555M	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Capacity Rating Wp	Pmax	540	399	545	403	550	407	555	410
Max. Power Voltage in V	Vpm	41.64	39.35	41.80	39.50	41.93	39.62	42.05	39.74
Max. Power Current in A	Ipm	12.97	10.15	13.04	10.20	13.12	10.26	13.20	10.33
Open Circuit Voltage in V	Voc	49.60	46.59	49.75	46.74	49.90	46.88	50.00	46.97
Short Circuit Current in A	Isc	13.86	10.87	13.92	10.92	13.98	10.97	14.05	11.02
Module Efficiency	%	20.92		21.12		21.31		21.50	
Power Tolerance	Wp	-0/+4.99							

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

\*\*NOCT irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1 m/sec.

## 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 mm <sup>2</sup> , 400 mm (Higher cable option available on request)
Front Glass	3.2 mm, High Transmission, AR coated tempered glass
Solar Cells	Mono PERC Crystalline - M10 (144 pcs Half Cut)
Cell Encapsulation	EVA - Ethylene Vinyl Acetate
Backsheet	Composite Film
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	-0.27%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmax	-0.35%/°C

## PERMISSIBLE OPERATING CONDITIONS

Temperature Range	-40°C to +85°C
Maximum System Voltage	1500 V DC
Max. Series Fuse Rating	25 A

## WARRANTY AND CERTIFICATIONS

Product Warranty	10 years Product Warranty
Performance Guarantee	25 year Linear Performance Warranty

## PACKAGING CONFIGURATION

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

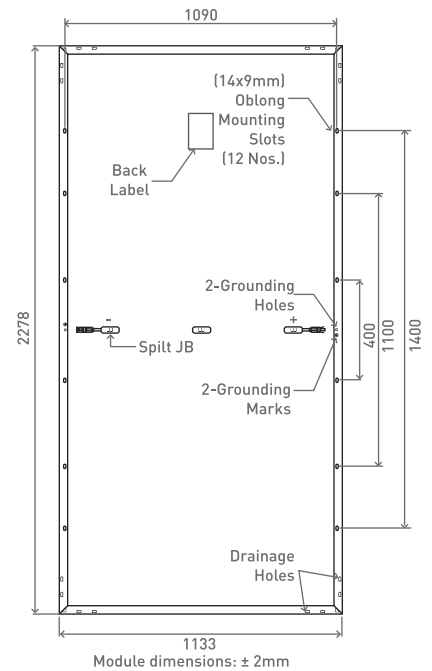
## JAKSON ENGINEERS LIMITED

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

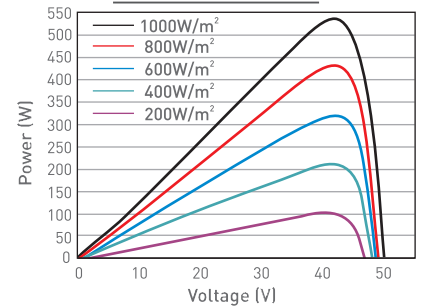
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E-mail: customer.support@jakson.com ; solar-bu@jakson.com | www.jakson.com

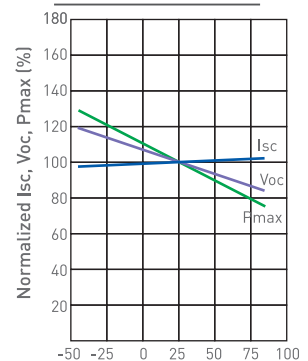
Dimension of PV Module  
Unit: mm



Power-Voltage Curve



Cell Temperature (°C)



Linear Performance Warranty

