

TRANSFORMING THE POWER OF SUN













MONOFACIAL SOLAR PV MODULE 540-555 Wp

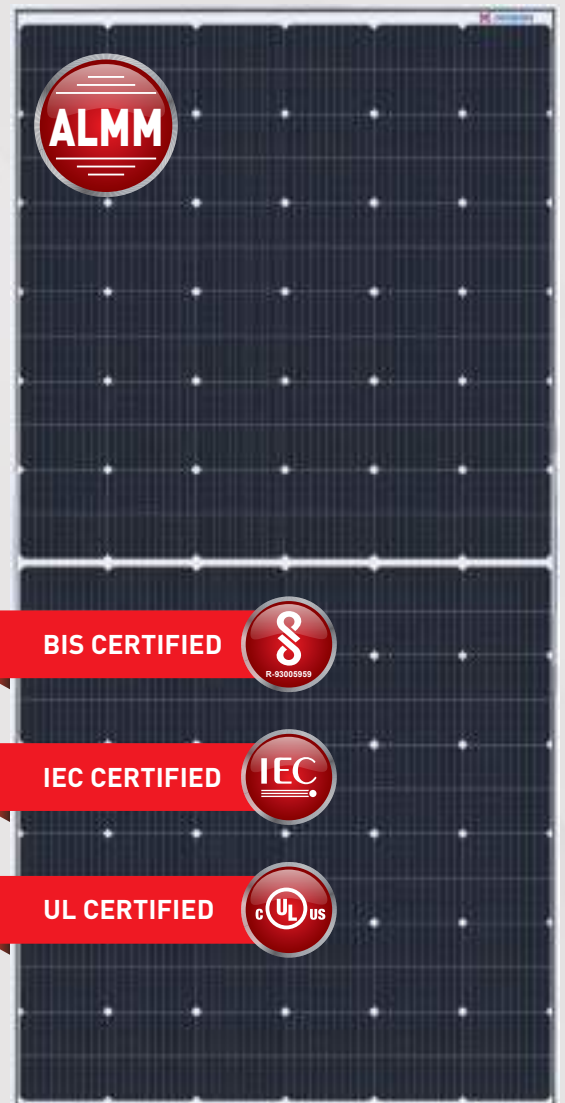
Best in Class Efficiency **21.50%**

MBB Technology **M10 Half Cut (144 Cells)**

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 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





**MONOFACIAL SOLAR
PV MODULES
540-555Wp**



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	Vmp	41.64	39.35	41.80	39.50	41.93	39.62	42.05	39.74
Max. Power Current in A	Imp	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/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.

MECHANICAL DATA

Dimensions (L x W x H)	MM: 2278 x 1133 x 35 IN: 89.68 x 44.60 x 1.37
Weight	28 kgs 61.73 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 Glass	3.2 mm / 0.126 in, 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

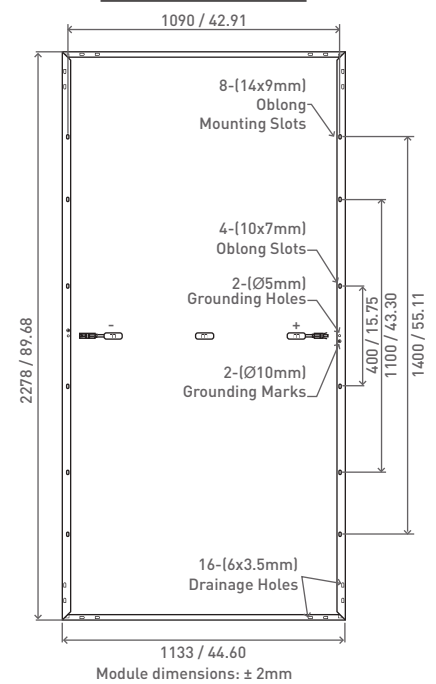
WARRANTY AND CERTIFICATIONS

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

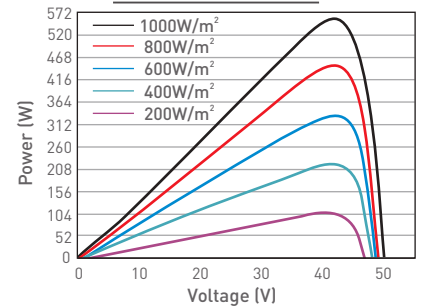
PACKAGING CONFIGURATION

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

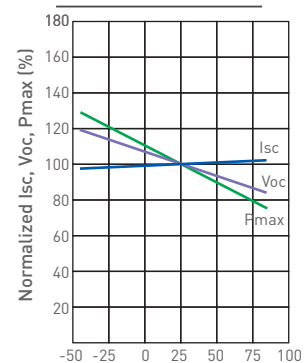
Dimension of PV Module
Unit: mm



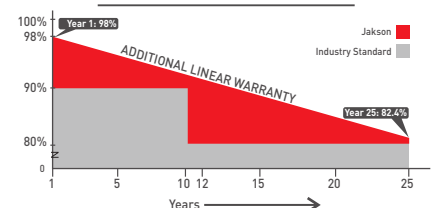
Power-Voltage Curve



Cell Temperature (°C)



Linear Performance Warranty



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Product specifications are subject to change without notice
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