

TRANSFORMING THE POWER OF SUN



NEXT GEN SOLAR PV MODULE 490-510 Wp

BEST IN CLASS EFFICIENCY

21.34%

MBB Technology using M10 Half Cut Cells

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



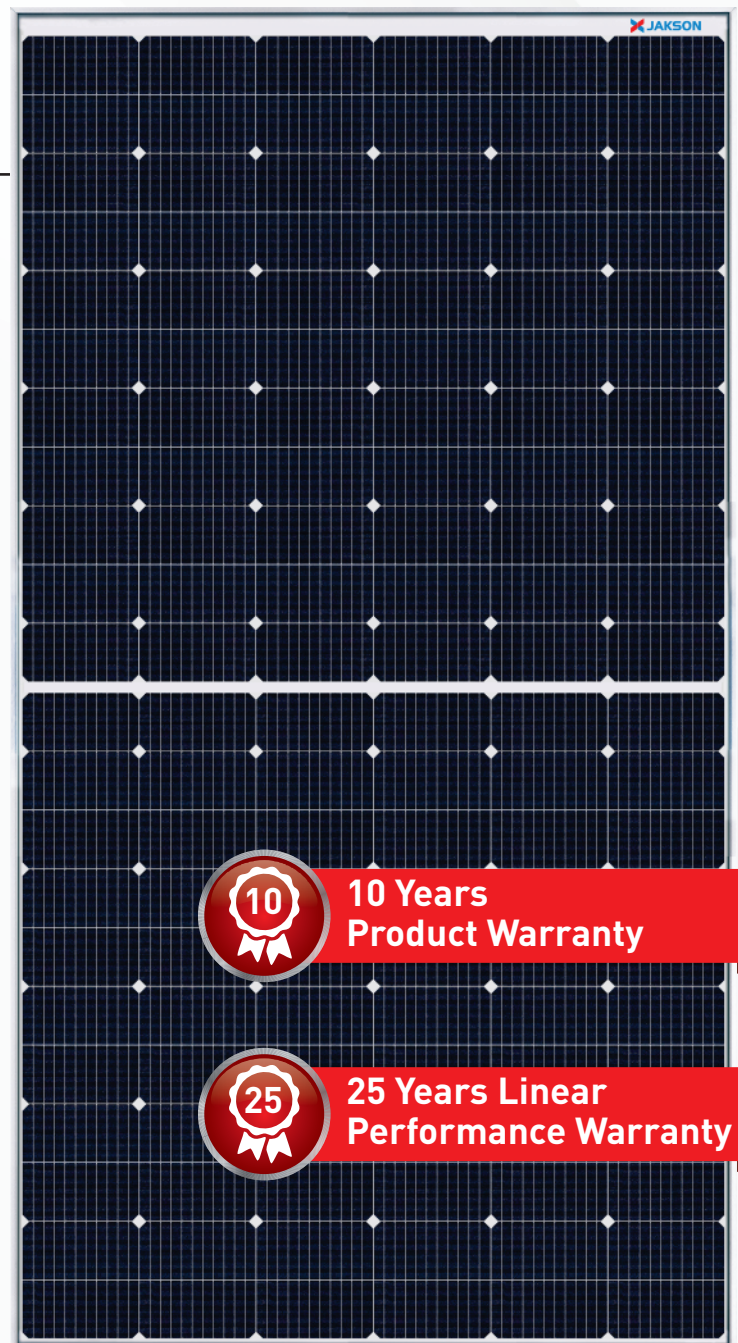
Half Cut Cell Design - Excellent performance under Partial Shading Conditions



Lower LCOE (Levelized Cost of Electricity) - Faster Return on Investment (ROI)



Variants - Monofacial & Bifacial options





**MONOFACIAL SOLAR
PV MODULES**
490-510Wp



ELECTRICAL DATA - STC

Model		JH-490M	JH-495M	JH-500M	JH-505M	JH-510M
Capacity Rating Wp	Pmax	490	495	500	505	510
Module Efficiency	%	20.50	20.71	20.92	21.13	21.34
Max. Power Voltage in V	Vpm	38.20	38.30	38.40	38.52	38.64
Max. Power Current in A	Ipm	12.83	12.93	13.03	13.12	13.20
Open Circuit Voltage in V	Voc	45.50	45.62	45.75	45.99	46.10
Short Circuit Current in A	Isc	13.74	13.80	13.86	13.90	13.97
Power Tolerance	Wp	-0/+4.99				

* Under Standard Test Conditions (STC) of 1000 W/m² irradiance, AM 1.5 spectrum and 25°C cell temperature.

MECHANICAL DATA

Dimensions (L x W x H)	2104 mm x 1136 mm x 35 mm (optional 40 mm)
Weight	27 kgs
Junction Box	Split JB, IP 67/68 with 3 bypass diodes
Cable	"Solar Cable 4.0 mm ² , 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 (132 pcs Half Cut)
Cell Encapsulation	EVA - Ethylene Vinyl Acetate
Backsheet	Composite Film
Frame	Anodized Aluminium Alloy

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	44°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

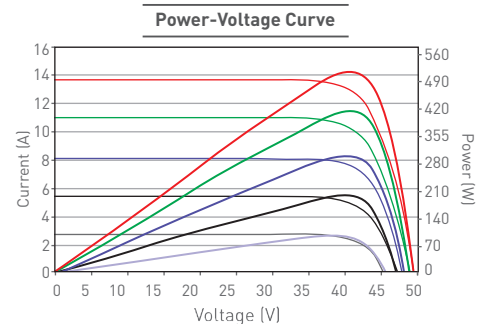
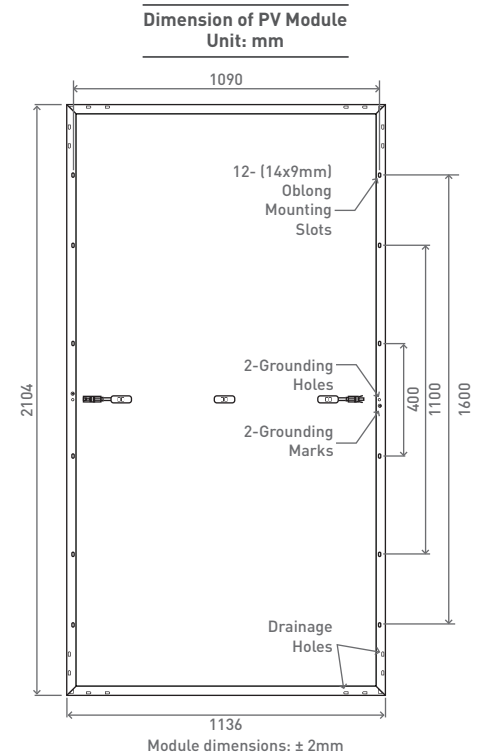
Temperature Range	-40°C to +85°C
Maximum System Voltage	1500 V DC
Max. Series Fuse Rating	25 A

WARRANTY AND CERTIFICATIONS

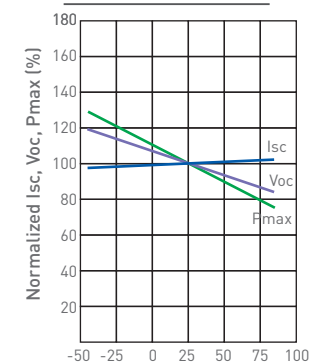
Product Warranty	10 years Product Workmanship Warranty
Performance Guarantee	25 year Linear Performance Warranty
Approvals and Certificates	**IEC 61215, IEC 61730 (I & II), IEC 61853, IEC 62804, IEC 60068, IEC 61701, IEC 62716, IS 14286 BIS ISO 9001:2015, 14001:2015, 45001:2018 certified facility in India



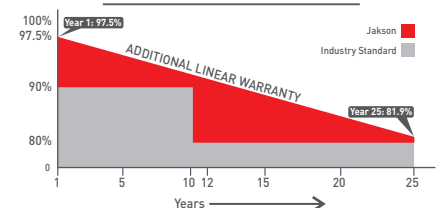
**Certification under progress



Cell Temperature (°C)



Linear Performance Warranty



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