

TRANSFORMING THE POWER OF SUN



NEXT GEN SOLAR PV MODULE 440-460 Wp

BEST IN CLASS EFFICIENCY

21.09%

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**
440-460Wp



ELECTRICAL DATA - STC

| Model | JH-440M | JH-445M | JH-450M | JH-455M | JH-460M |
|----------------------------|-------------|---------|---------|---------|---------|
| Capacity Rating Wp | Pmax 440 | 445 | 450 | 455 | 460 |
| Module Efficiency | % 20.17 | 20.40 | 20.63 | 20.86 | 21.09 |
| Max. Power Voltage in V | Vpm 34.11 | 34.26 | 34.43 | 34.58 | 34.83 |
| Max. Power Current in A | Ipm 12.90 | 12.99 | 13.07 | 13.16 | 13.21 |
| Open Circuit Voltage in V | Voc 40.85 | 41.05 | 41.22 | 41.40 | 41.52 |
| Short Circuit Current in A | Isc 13.74 | 13.80 | 13.86 | 13.92 | 13.99 |
| 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) | 1920 mm x 1136 mm x 35 mm (optional 40 mm) |
| Weight | 24.5 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 (120 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

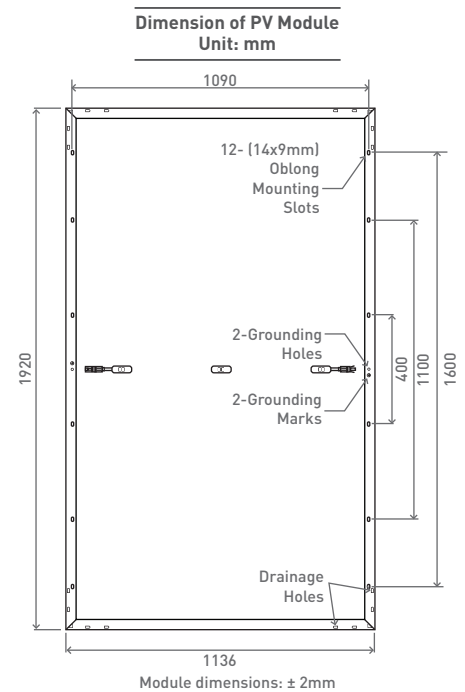
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|-------------------------|----------------|
| Temperature Range | -40°C to +85°C |
| Maximum System Voltage | 1500 V DC |
| Max. Series Fuse Rating | 25 A |

WARRANTY AND CERTIFICATIONS

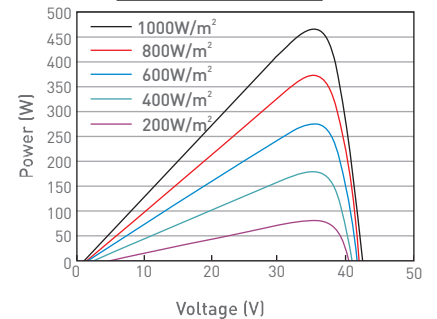
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|----------------------------|---|
| Product Warranty | 10 years Product Workmanship Warranty |
| Performance Guarantee | 25 year Linear Performance Warranty |
| Approvals and Certificates | **IEC 61215, IEC 61730 (I & II), IEC 61853, IEC 62804, IEC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



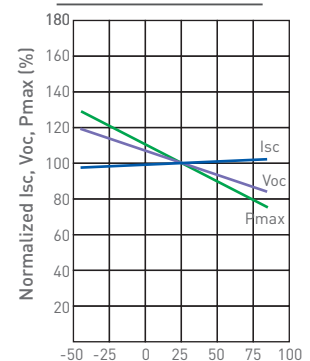
**Certification under progress



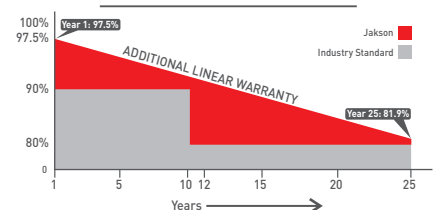
Power-Voltage Curve



Cell Temperature (°C)



Linear Performance Warranty



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