

Monocrystalline Half-Cut Cell Solar Panel

395-415W

This monocrystalline solar panel utilizes half-cut cells measuring 158.75 x 79.375 mm. The panel comprises 144 cells in a 6 x 24 configuration and delivers power outputs ranging from 395W to 415W.



Product Overview

High-Efficiency Half-Cut Solar Module

This monocrystalline half-cut cell solar panel offers a power output range of 395W to 415W, designed for high-performance energy generation. Utilizing 144 half-cut PERC cells, it minimizes resistive losses and improves current collection for enhanced efficiency of up to 20.60%. Built with high-transmission tempered glass and an anodized aluminum alloy frame, this module ensures durability and reliability in demanding environmental conditions.

Mechanical Characteristics



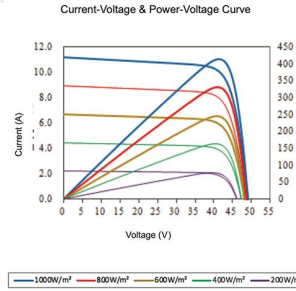
Technical diagram detailing dimensions and mounting hole locations.

Connection Details

- Junction Box: IP67
- Cable: 4mm² (1100mm length)
- Connectors: MC4 / MC4 Compatible

Cell Configuration	144 (6 × 24) Monocrystalline half-cut cells
Dimensions	2008mm × 1002mm × 40mm
Weight	23 kg
Construction Materials	High transmission tempered glass, Anodized aluminum alloy frame

Electrical Characteristics



Current-Voltage and Power-Voltage curves demonstrating performance across various irradiance levels.

Performance Range (STC)

Metric	395W Model	415W Model
Open-Circuit Voltage (Voc)	48.6V	49.0V
Short-Circuit Current (Isc)	10.67A	11.15A
Optimum Operating Voltage (Vmp)	40.5V	41.3V
Optimum Operating Current (Imp)	9.76A	10.06A
Module Efficiency	19.6%	20.6%

System Limits

- Max System Voltage: 1000V / 1500V DC
- Max Series Fuse Rating: 15A
- Power Tolerance: 0 ~ +5W
- Operating Temperature: -40°C to +85°C

Temperature Characteristics

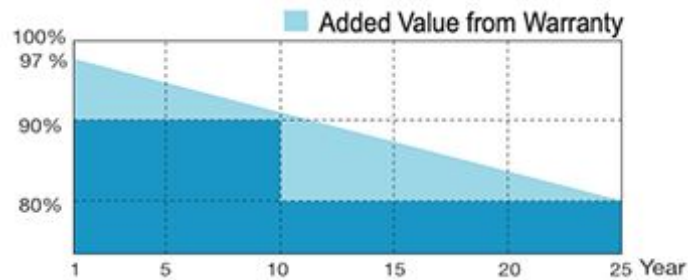
Temperature Coefficients

-0.39 %/K
Pmax

-0.29 %/K
Voc

0.049 %/K
Isc

Warranty



Graphical representation of the 25-year power output warranty coverage.

Warranty Coverage

- 10-year product warranty
- 25-year power output warranty