

N-Type Bifacial 144HC

Dual Glass



580-600W

Class leading power output

Positive Power
Tolerance
0 to +3%



Solar Built for the Long Haul

Mission Solar Energy is headquartered in San Antonio, Texas. This product is tailored for commercial and utility applications. Every Mission Solar Energy solar module is certified and surpasses industry standard regulations, providing excellent performance over the long term. Mission Solar Energy is a proud member of the OCI family of companies.

America's Module Company®



Fair Trade Practices

- Free of forced labor at all stages of the supply chain
- Not subject to AD/CVD tariffs or investigations



Certified Reliability

- Tested to UL 61730
- PID resistant



Advanced Technology

- SMBB Technology
- N-Type Cell
- Ideal for utility and commercial applications

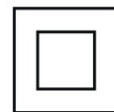


Extreme Weather Resilience

- Up to 5,400 Pa front load & 2,400 Pa back load
- Tested load to UL 61730
- Hail tests results exceed 25mm at 23 m/s

CERTIFICATIONS

CEC



UL 61730

FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 1% in year 1 and 0.4% annually from years 2 to 30, with 87.4% guaranteed in year 30; 15-year product warrant and 30-year warranty on power output.

For more information, visit www.missionsolar.com/warranty

If you have questions or concerns about certification of our products in your area, please contact Mission Solar Energy.

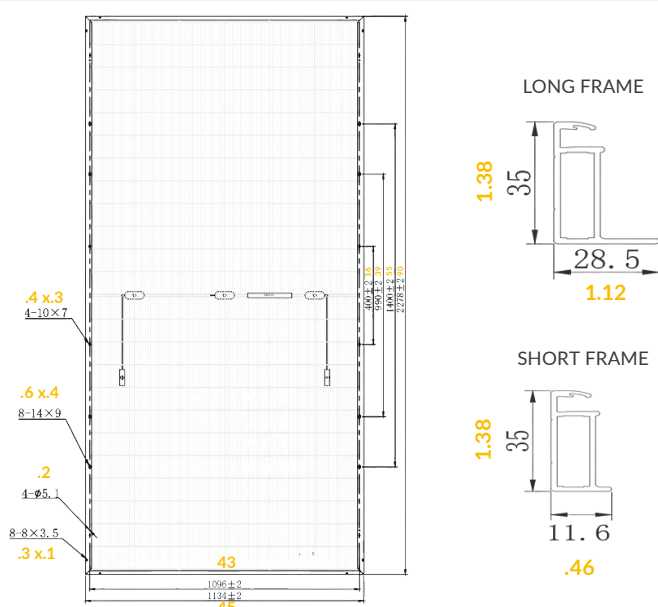
www.missionsolar.com | info@missionsolar.com

ELECTRICAL SPECIFICATION

| PRODUCT TYPE | MSH10-xxxHN4G (xxx = P _{max}) | | | | |
|-----------------------|---|----|-------|-------|-------|
| Power Output | P _{max} | Wp | 585 | 590 | 595 |
| Module Efficiency | % | | 22.6 | 22.8 | 23 |
| Tolerance | % | | 0/+3 | 0/+3 | 0/+3 |
| Short Circuit Current | I _{sc} | A | 14.47 | 14.55 | 14.62 |
| Open Circuit Voltage | V _{oc} | V | 51.5 | 51.7 | 51.85 |
| Rated Current | I _{mp} | A | 13.53 | 13.59 | 13.67 |
| Rated Voltage | V _{mp} | V | 43.3 | 43.5 | 43.55 |
| Fuse Rating | A | | 25 | 25 | 25 |
| System Voltage | V | | 1,500 | 1,500 | 1,500 |

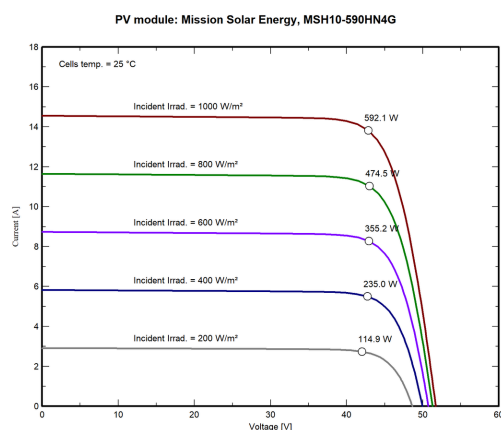
BASIC DIMENSIONS

[UNITS: MM/IN]



CURRENT-VOLTAGE CURVE

MSH10-590HN4G: 590W, 144 CELL SOLAR MODULE



ELECTRICAL SPECIFICATION (BACKSIDE)

| | | | | | |
|-----------------------|------------------|----|-------|-------|-------|
| Power Output | P _{max} | Wp | 445 | 449 | 453 |
| Short Circuit Current | I _{sc} | A | 11.66 | 11.73 | 11.79 |
| Open Circuit Voltage | V _{oc} | V | 49.4 | 49.6 | 49.8 |
| Rated Current | I _{mp} | A | 10.7 | 10.77 | 10.82 |
| Rated Voltage | V _{mp} | V | 41.6 | 41.7 | 41.9 |

TEMPERATURE COEFFICIENTS

| | |
|---|-------------|
| Nominal Module Operating Temperature (NMOT) | 45°C (±2°C) |
| Temperature Coefficient of P _{max} | -0.29%/°C |
| Temperature Coefficient of V _{oc} | -0.23%/°C |
| Temperature Coefficient of I _{sc} | 0.046%/°C |

OPERATING CONDITIONS

| | |
|---------------------------------|--|
| Maximum System Voltage | 1,500 Vdc |
| Operating Temperature Range | -40°F to 185°F (-40°C to +85°C) |
| Maximum Series Fuse Rating | 25A |
| Fire Safety Classification | Type 29 |
| Front & Back Load (UL Standard) | Up to 5,400 Pa front and 2,400 Pa back load. |

MECHANICAL DATA

| | |
|------------------|---|
| Solar Cells | N-type TOPCON Monocrystalline |
| Cell Orientation | 144 cells |
| Module Dimension | 2278 mm x 1134 mm x 35 mm |
| Weight | 71.65 lbs. (32.5±0.5kg) |
| Front Glass | 2.0 mm High Transmission Tempered Glass |
| Back Glass | 2.0 mm High Transmission Tempered Glass |
| Frame | Anodized Aluminum Alloy |
| Encapsulant | Polyolefin Elastomer (POE) |
| Junction Box | IP 68 Rated |
| Cable | Wire 4 mm ² (12AWG) |
| Connector | MC4 EV02 / MC4 |

SHIPPING INFORMATION

| | | | | |
|---|-------------|---------|---------|-----------|
| Truck Load | Ship To | Pallets | Modules | 590W Bin |
| 53' | Most States | 16 | 496 | 292.64 kW |
| Double Stack: (Horizontal Orientation): 31 modules per pallet | | | | |

PALLET [31 MODULES]

| | | | |
|-----------------------|--------------------|--------------------|--------------------|
| Weight | Height | Width | Length |
| 1000 kg (2205 lbs) | 49 in (1243 mm) | 45 in (1145 mm) | 91 in (2304 mm) |

CERTIFICATIONS



Mission Solar Energy

8303 S. New Braunfels Ave., San Antonio, Texas
78235 www.missionsolar.com | info@missionsolar.com

Mission Solar Energy reserves the right to make specification changes without notice.

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www.missionsolar.com | info@missionsolar.com