DOMESTIC CONTENT

N-Type Bifacial 144HC

Dual Glass

MISSION SOLAR ENERGY

NON-PFE, FEOC COMPLIANT

580-600W

Class leading power output

Positive Power Tolerance

0 to +3%



American 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.

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
- Hail tests results exceed 25mm at 23 m/s

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

MADE IN THE USA — Modules Assembled & Designed & Engineered in the USA of U.S. and non-U.S. parts

America's Module Company®

CERTIFICATIONS

CEC

C SA US

UL 61730

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

C-MKTG-0054 VERSION: 1 VERSION DATE: 7/16/2026

Class Leading
580-600W

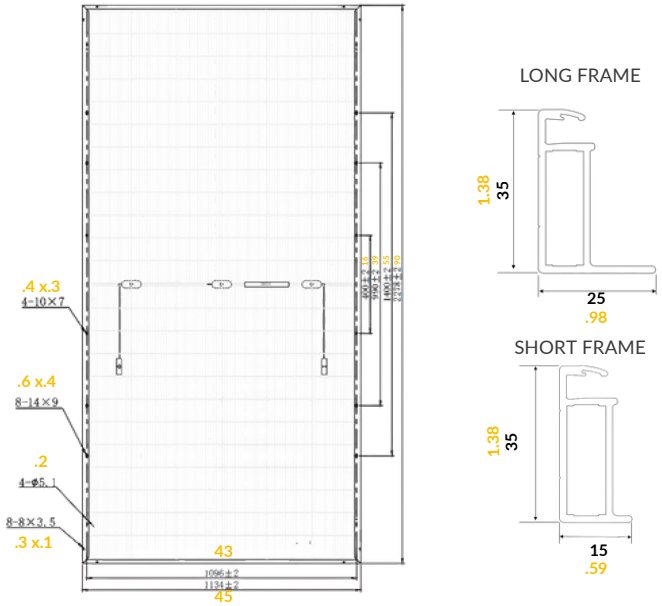
N-Type Bifacial 144HC Dual Glass

ELECTRICAL SPECIFICATION

PRODUCT TYPE	MSH10-xxxHN4G-DC (xxx = Pmax)				
Power Output	Pmax	Wp	590	595	600
Module Efficiency		%	22.8	23.0	23
Tolerance		%	0/+3	0/+3	0/+3
Short Circuit Current	Isc	A	14.55	14.62	14.70
Open Circuit Voltage	Voc	V	51.7	51.85	52.00
Rated Current	Imp	A	13.59	13.67	13.73
Rated Voltage	Vmp	V	43.5	43.55	43.70
Fuse Rating		A	25	25	25
System Voltage		V	1,500	1,500	1,500

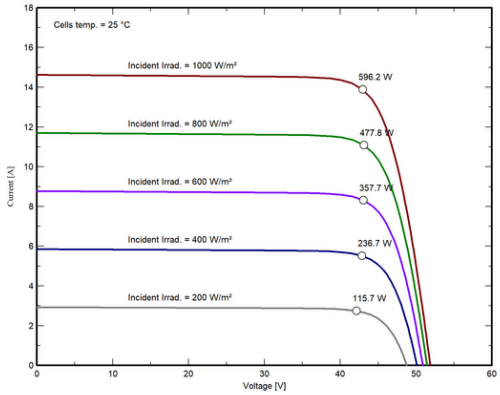
BASIC DIMENSIONS

[UNITS: MM/IN]



CURRENT-VOLTAGE CURVE

MSH10-xxxHN4G-DC: 595W, 144 CELL SOLAR MODULE



ELECTRICAL SPECIFICATION (BACKSIDE)

Power Output	Pmax	Wp	449	453	457
Short Circuit Current	Isc	A	11.73	11.79	11.86
Open Circuit Voltage	Voc	V	49.6	49.8	50.00
Rated Current	Imp	A	10.77	10.82	10.89
Rated Voltage	Vmp	V	41.7	41.9	42.10

TEMPERATURE COEFFICIENTS

Nominal Module Operating Temperature (NMOT)	45°C (±2°C)
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.23%/°C
Temperature Coefficient of Isc	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 Monocrystalline
Cell Orientation	144 cells
Module Dimension	2278 mm x 1134 mm x 35 mm
Weight	71.65 lbs. (32.5±0.5 kg)
Front Glass	2.0 mm High Transmission Tempered Glass
Back Glass	2.0 mm High Transmission Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP 68 Rated
Cable	400mm or 1200mm, Wire 4 mm^2 (12AWG)
Connector	MC4 Compatible
Domestic Content	Available- Contact Sales Team

SHIPPING INFORMATION

Truck Load	Ship To	Pallets	Modules	595W Bin
53'	Most States	16	496	295.12 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

CEC C SP US

UL 61730

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