N-Type 108HC

Mono-facial High Efficiency N-type

MISSION SOLAR ENERGY

435W

Class leading power output

Positive Power Tolerance

0 to +3%



BEST-IN-CLASS WARRANTY

Degradation guaranteed not to exceed 1% in year 1 and 0.45% annually from years 2 to 30 with 86.0% capacity guaranteed in year 30. For more information, visit www.missionsolar.com/warranty



American Solar Built for the Long Haul

Mission Solar Energy, headquartered in San Antonio, Texas, offers high-quality, American-made solar modules designed specifically for residential and commercial rooftops. Engineered for maximum efficiency and durability in real-world conditions, our modules combine sleek aesthetics with best-in-class performance to power homes and businesses for decades to come.

America's Module Company®

High Power Output

- Up to 23% efficiency with advanced high-density interconnect technology
- Multi-busbar design improves current flow and reduces resistance for better energy

Built for Tough Conditions

- Enhanced cell processing and material control for long-term durability
- Resists corrosion and degradation in harsh environments
- Up to 5400 Pa front load and 2400 Pa back load for mechanical strength

More Energy, More of the Time

- Proven performance in low light and at challenging angles, verified by third-party testing
- Glass design maintains output even in cloudy or shifting weather
- Low temperature coefficient (-0.29%/°C)

CERTIFICATIONS

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

CEC

ETL Listed c us Intertek

CSA

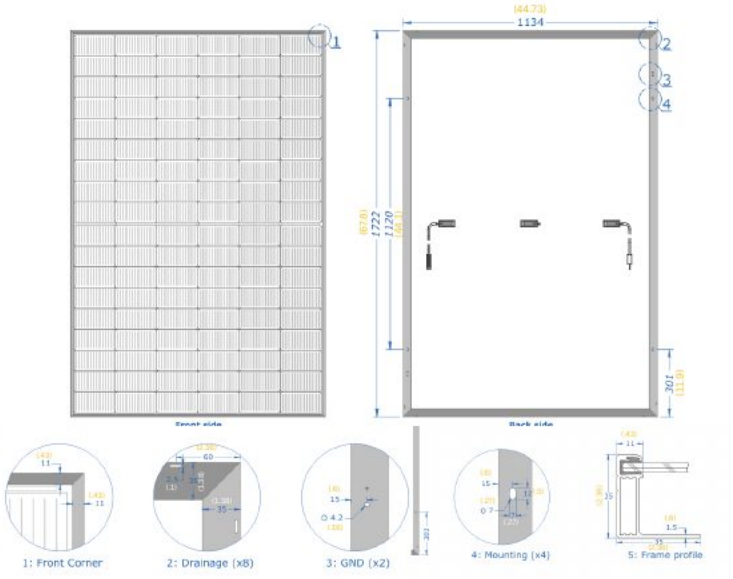
If you have questions or concerns about certification of our products in your area, please contact Mission Solar Energy.

Class Leading
435-445W

N-Type 108HC

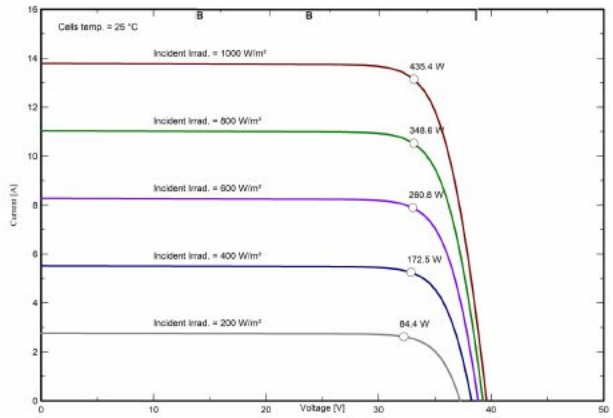
BASIC DIMENSIONS

[UNITS: MM/IN]



CURRENT-VOLTAGE CURVE

MSX10-xxxHN0B: 435W, 108 CELL SOLAR MODULE



WARRANTY INFORMATION

Module product workmanship warranty Linear	25 years
power performance warranty	30 years ≥99% end 1st year ≥94.05 % end of 12th year ≥88.2% end of 25th year ≥86% end of 30th year

CERTIFICATIONS AND TESTS

UL	61730

CEC

ELECTRICAL SPECIFICATION

PRODUCT TYPE	MSX10-xxxHN0B (xxx = Pmax)				
Power Output	Pmax	Wp	435	440	445
Module Efficiency		%	22.3	22.5	22.8
Short Circuit Current	Isc	A	13.79	13.9	14.02
Open Circuit Voltage	Voc	V	39.56	39.62	39.69
Rated Current	Imp	A	13.07	13.19	13.31
Rated Voltage	Vmp	V	33.31	33.37	33.44
Fuse Rating		A	30	30	30
System Voltage		V	1,500	1,500	1,500

Electrical tolerances under STC: Isc ±5%. Voc ±5%, Pmax +3%

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	45°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.05%/°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 Fire	30A
Safety Classification	Type 1
Front & Back Load (UL Standard)	Up to 5,400 Pa front and 2,400 Pa back load. Tested to UL 61730

**Mission Solar Energy uses quality sourced materials that result in a Type 1 fire rating. Please note, the 'Fire Class' Rating is designated for the fully-installed PV system, which includes, but is not limited to, the module, the type of mounting used, pitch and roof composition.*

MECHANICAL DATA

Solar Cells	N-type TOPCon Monocrystalline
Cell Orientation	108 cells
Module Dimension	1722 mm x 1134 mm x 35 mm
Weight	46.96 lbs. (21.3 kg)
Front Glass	3.2 mm AR Coating Tempered Glass
Frame	35 mm Anodized Aluminum, Black
Encapsulant	Polyolefin Elastomer (POE)
Junction Box	IP 68 Rated
Cable	1.2 m, Wire 4 mm² (12AWG)
Connector	Staubli MC4
Domestic Content	6.2%

SHIPPING INFORMATION

Truck Load	Ship To	Pallets	Modules	435W Bin
53'	Most States	30	840	365.4 kW
Double Stack: (Horizontal Orientation): 28 modules per pallet				

PALLET [28 MODULES]

Weight	Height	Width	Length
1,360 lbs. (617 kg)	44.25 in (112.4 cm)	47.25 in (120 cm)	70 in (177.8 cm)

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