

MST N-Type 96HC

N-type Backsheet Monocrystalline Module

MISSION SOLAR ENERGY



435W

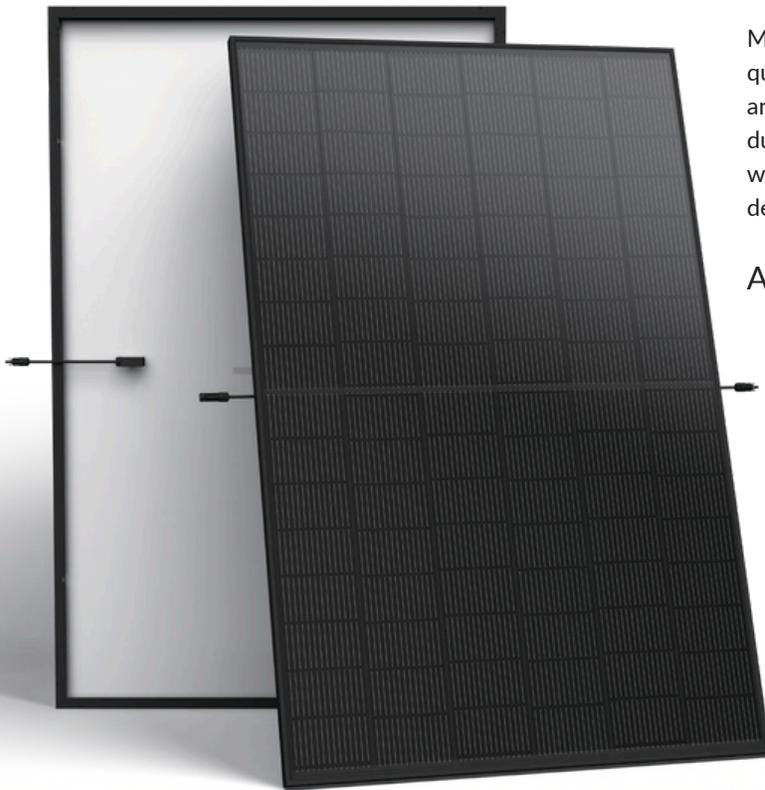
Positive Power Tolerance

Class leading power output -0 to +5W

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



- Achieves up to 22.3% 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 –salt spray, ammonia, sand, humidity, and high heat
- Certified for 5400Pa front load and 5400 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
- Specialized glass design maintain output even in cloudy or shifting weather
- Low temperature coefficient (-0.29%) and up to 25% extra energy from rear-side production depending on surface reflectivity

FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 1% in year 1 and 0.4% annually from years 2 to 25 with 89.4% capacity guaranteed in year 25. For more information, visit www.missionsolar.com/warranty

CERTIFICATIONS

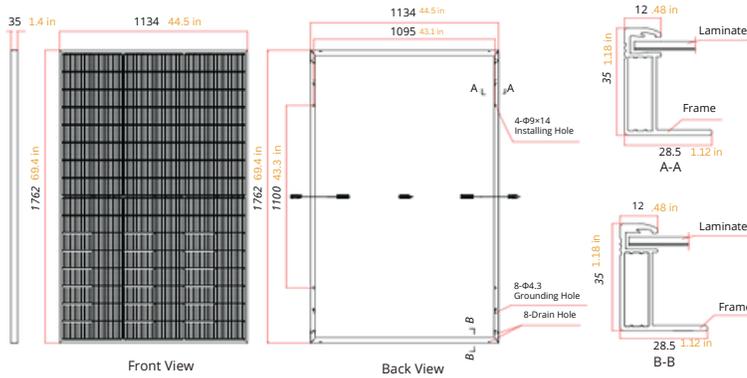


If you have questions or concerns about certification of our products in your area, please contact Mission Solar Energy.



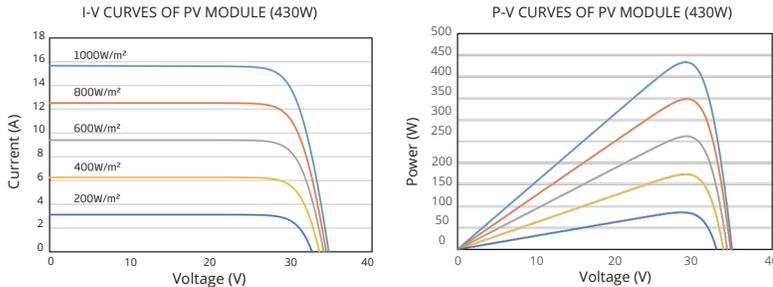
BASIC DIMENSIONS

[UNITS: MM/IN]



CURRENT-VOLTAGE CURVE

MST435HN6B: 435W, 96 CELL SOLAR MODULE



CERTIFICATIONS AND TESTS

IEC	61215, 61730, 61701
UL	617 3 0



Mission Solar Energy

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ELECTRICAL SPECIFICATION

PRODUCT TYPE	MSTxxxHN6B (xxx = P _{max})			
Power Output	P _{max} Wp	435	440	445
Module Efficiency	%	21.8	22.0	22.3
Tolerance		0/+5	0/+5	0/+5
Short Circuit Current	I _{sc} A	15.96	16.01	16.07
Open Circuit Voltage	V _{oc} V	34.5	34.8	35.1
Rated Current	I _{mp} A	14.99	15.02	15.08
Rated Voltage	V _{mp} V	29.1	29.3	29.5
Fuse Rating	A	30A	30A	30A
System Voltage	V	1,500	1,500	1,500

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	43°C (±2°C)
Temperature Coefficient of P _{max}	-0.29%/°C
Temperature Coefficient of V _{oc}	-0.24%/°C
Temperature Coefficient of I _{sc}	0.04%/°C

OPERATING CONDITIONS

Maximum System Voltage	1,500Vdc
Operating Temperature Range	-40°F to 185°F (-40°C to +85°C)
Maximum Series Fuse Rating	30A
Fire Safety Classification	Type 1* or Type 2
Front & Back Load (UL Standard)	Up to 5,400 Pa front and 5,400 Pa back load. Tested to UL 61730
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*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 i-TOPCon Monocrystalline
Cell Orientation	96 cells
Module Dimension	1762mm x 1134mm x 35mm
Weight	47.4 lbs. (21.5kg)
Front Glass	3.2mm AR Coating Tempered Glass
Frame	35mm Anodized Aluminum Alloy, Black
Encapsulant	Ethylene vinyl acetate (EVA)
Junction Box	IP 68 Rated
Cable	1.2m, Wire 4mm ² (12AWG)
Connector	MC4 EV02 / TS4 Plus / TS4*

SHIPPING INFORMATION

Truck Load	Ship To	Pallets	Modules	435W Bin
53'	Most States	26	806	330.46 kW
Double Stack: (Horizontal Orientation): 31 modules per pallet				

PALLET [31 MODULES]

Weight	Height	Width	Length
1,610 lbs. (730 kg)	51 in (129.5 cm)	47 in (119.4 cm)	70 in (175.3 cm)