

# MSI TOPCon Bifacial 144HC

Dual Glass

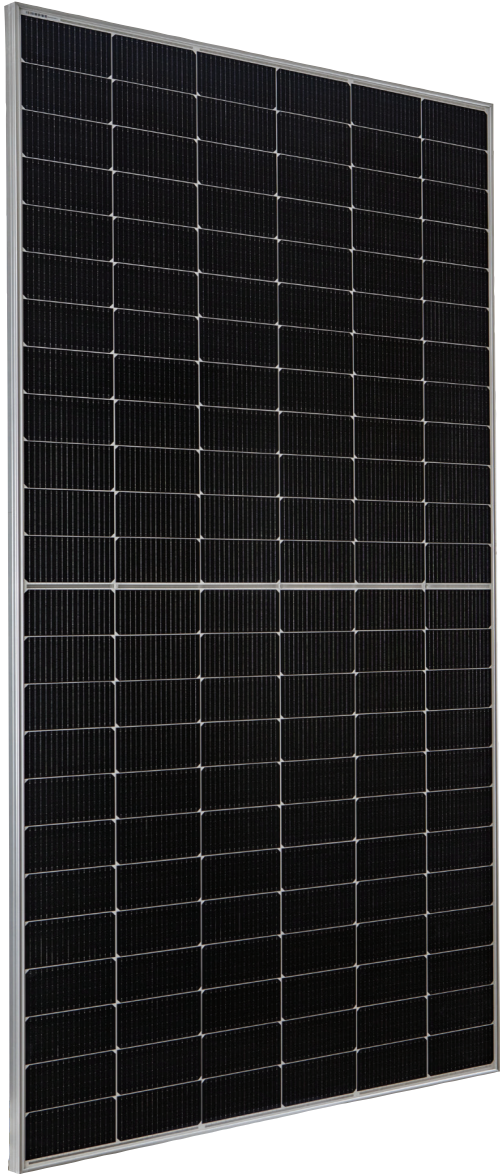


## 570-580 W

Positive Power Tolerance

-0 to +5 W

Class leading power output



## 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 & IEC Standards
- PID resistant
- Resistance to salt mist corrosion



#### Advanced Technology

- SMBB Technology
- TopCon 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 25 mm 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.

For more information, visit [www.missionsolar.com/warranty](http://www.missionsolar.com/warranty)

### CERTIFICATIONS

CEC

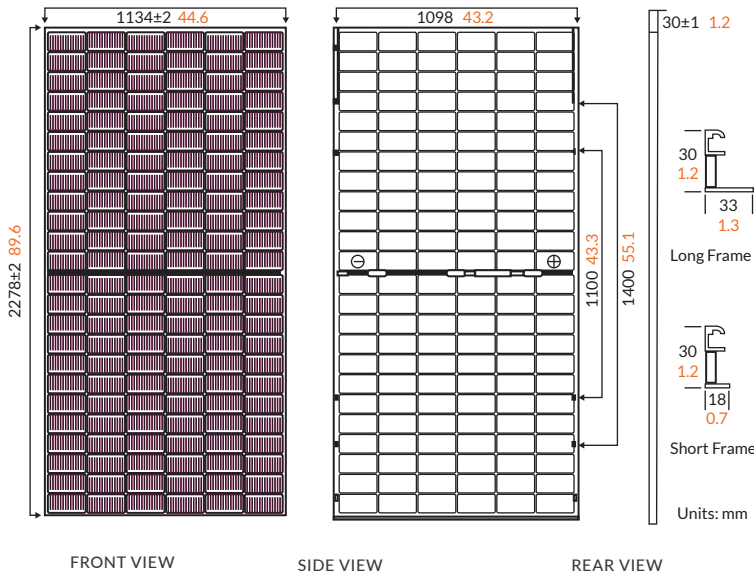


UL 61730 / IEC 61215 / IEC 61730 / IEC 61701

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

## BASIC DIMENSIONS

[UNITS: MM/IN]



## ELECTRICAL SPECIFICATION

PRODUCT TYPE	MSI10-xxxHN4G (xxx = P <sub>max</sub> )				
Power Output	P <sub>max</sub>	W <sub>p</sub>	570	575	580
Module Efficiency	%		22.07	22.28	22.47
Tolerance	W		0/+5	0/+5	0/+5
Short Circuit Current	I <sub>sc</sub>	A	14.31	14.39	13.76
Open Circuit Voltage	V <sub>oc</sub>	V	50.74	50.88	51.02
Rated Current	I <sub>mp</sub>	A	13.55	13.62	13.69
Rated Voltage	V <sub>mp</sub>	V	42.07	42.22	42.37
Fuse Rating	A		30	30	30
System Voltage	V		1,500	1,500	1,500

## BIFACIAL OUTPUT | REAR SIDE POWER GAIN

5%-Maximum Power (P <sub>max</sub> )	599 W	604 W	609 W
5%-Module Efficiency STC(%)	23.17%	22.57%	22.78%
15%-Maximum Power (P <sub>max</sub> )	656 W	661 W	667 W
15%-Module Efficiency STC(%)	25.37%	25.60%	25.82%
25%-Maximum Power (P <sub>max</sub> )	748 W	755 W	761 W
25%-Module Efficiency STC(%)	28.96%	29.21%	29.47%

## TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	45°C (±2%)
Temperature Coefficient of P <sub>max</sub>	-0.310%/°C
Temperature Coefficient of Voc	-0.284%/°C
Temperature Coefficient of I <sub>sc</sub>	0.024%/°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	30 A
Fire Safety Classification	Type 29
Front & Back Load	Up to 5,400 Pa snow and 2,400 Pa wind load
Hail Safety Impact Velocity	25 mm at 23 m/s

\*Mission Solar Energy uses quality sourced materials that result in a Type 29 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, 182 mm x 91 mm (Indonesia)
Cell Orientation	144 half-cut cells
Module Dimension	2278(±2 mm) x 1134(±2 mm) x 30(±1 mm)
Weight	71.2 lbs (32.3 kg)
Front/Back Glass	Semi-tempered double glass, 2.0 mm/2.0 mm
Frame	30 mm Anodized
Junction Box	Protection class IP68 with 3 bypass-diodes
Cable	1.2 m, wire 4 mm <sup>2</sup> (12 AWG)
Connector	Stäubli EVO2 MC4

## SHIPPING INFORMATION

Container Feet	Pallets	Modules	580W Bin	Total Weight
40'	20	720	417.6 kW	52,593 lbs
53'	15	540	313.2 kW	39,445 lbs

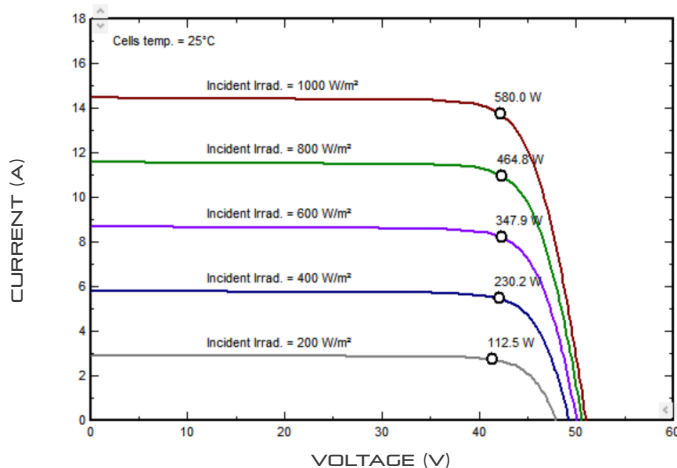
## PALLET [36 MODULES]

Weight	Height	Width	Length
2629 lbs (1192.8 kg)	50 in (1271 mm)	44.5 in (1130 mm)	91 in (2313 mm)

## CURRENT-VOLTAGE CURVE

MSI10-580HN4G, 580 W, 144 HALF-CUT CELL SOLAR MODULE

Current-voltage characteristics with dependence on irradiance and module temperature



## CERTIFICATIONS AND TESTS

IEC	61215, 61730
UL	61730

CEC



# Mission Solar Energy

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