

# MSI PERC Bifacial 144HC

Transparent Backsheet



# 545-555W

Class leading power output

Positive Power Tolerance  
**-0 to +5W**



## 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

- Half-cut cell with 10 busbar
- Passivated Emitter Rear Contact
- Engineered for residential and commercial applications



#### Extreme Weather Resilience

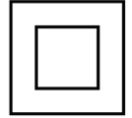
- Up to 5,400 Pa front load & 2,400 Pa back load
- Tested load to UL 61730 & IEC Standards
- Hail tests results exceed 25mm at 23 m/s

### FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 2% in year 1 and 0.5% annually from years 2 to 25 with 84.8%. 12-year Material and Workmanship/ 30-year Linear Power Output

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

### CERTIFICATIONS

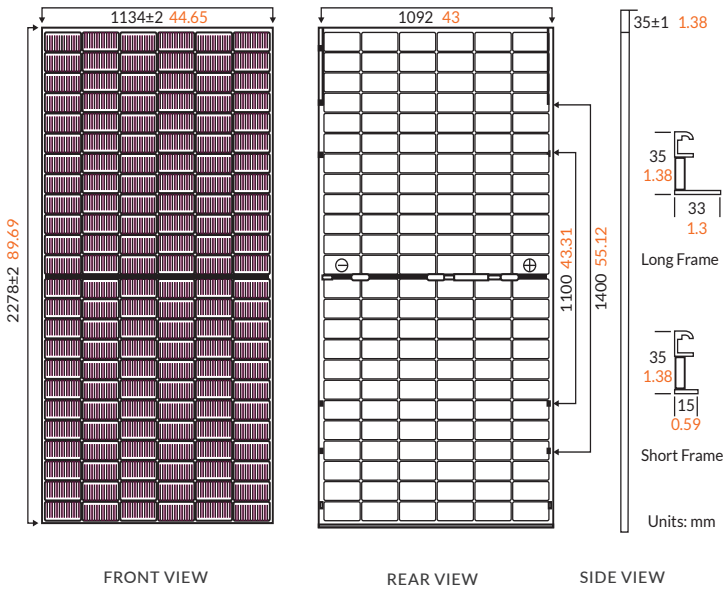


UL 61730 / IEC 61215 / IEC 61730

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

## BASIC DIMENSIONS

[UNITS: MM/IN]



FRONT VIEW

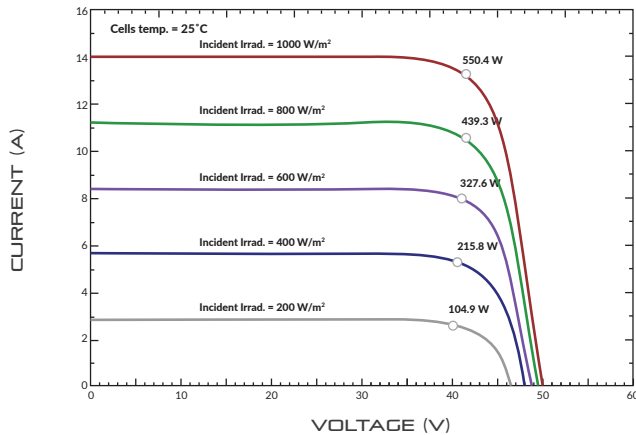
REAR VIEW

SIDE VIEW

## CURRENT-VOLTAGE CURVE

### MSI10-550HT4T, 144 HALF-CUT CELL SOLAR MODULE

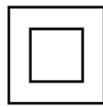
Current-voltage characteristics with dependence on irradiance and module temperature



## CERTIFICATIONS AND TESTS

MSI10-550HT4T IEC 61215, 61730, 61701  
UL 61730

CEC



## ELECTRICAL SPECIFICATION

PRODUCT TYPE	MSI10-xxxHT4T (xxx = P <sub>max</sub> )		
Power Output	P <sub>max</sub>	W <sub>p</sub>	545 550 555
Module Efficiency	%	21.30 21.50 21.69	
Tolerance	W	0/+5 0/+5 0/+5	
Short Circuit Current	I <sub>sc</sub>	A	13.92 13.99 14.02
Open Circuit Voltage	V <sub>oc</sub>	V	49.65 49.80 49.95
Rated Current	I <sub>mp</sub>	A	13.04 13.11 13.19
Rated Voltage	V <sub>mp</sub>	V	41.80 41.95 42.09
Fuse Rating	A	30 30 30	
System Voltage	V	1,500 1,500 1,500	

## BIFACIAL OUTPUT | REARSIDE POWER GAIN

5%-Maximum Power (P <sub>max</sub> )	572	578	583
5%-Module Efficiency STC(%)	22.37	22.57	22.78
15%-Maximum Power (P <sub>max</sub> )	627	633	638
15%-Module Efficiency STC(%)	24.30	24.53	24.75
25%-Maximum Power (P <sub>max</sub> )	681	688	694
25%-Module Efficiency STC(%)	26.42	26.66	26.90

## TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	45°C (±2%)
Temperature Coefficient of P <sub>max</sub>	-0.350%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.270%/°C
Temperature Coefficient of I <sub>sc</sub>	0.005%/°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	UL Type 1
Front & Back Load (UL Standard)	Up to 5,400 Pa front/snow and 2,400 Pa back/wind load
Hail Safety Impact Velocity	25mm at 23 m/s

\*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	PERC, 182mm x 91mm, 144 (6x24)
Cell Orientation	144 half-cut cells
Module Dimension	2278(±2mm) x 1134(±2mm) x 35(±1mm)
Weight	60 lbs. (27.2kg)
Front / Back Glass	Front 3.2 mm, transparent backsheet
Frame	Anodized aluminum profile
Junction Box	Protection class IP68 with 3 bypass-diodes
Cable	1.2m, wire 4mmx <sup>2</sup> (12AMG)
Connector	Stäubli EVO2 MC4

## SHIPPING INFORMATION

Container Feet	Ship To	Pallet	Panels	550W Bin
40'	Most States	20	720	396 kW

## PALLET [36 PANELS]

Weight	Height	Width	Length
2555 lbs. (1159 kg)	50 in (1271 mm)	44 in (1130 mm)	91 in (2308 mm)

# Mission Solar Energy

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