

# MSI PERC Bifacial 144HC

Transparent Backsheet

MISSION SOLAR  
ENERGY



## 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

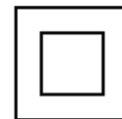
### FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 2% in year 1 and 0.55% annually from years 2 to 25, with 84.8% guaranteed in year 25; 12-year Material and Workmanship coverage.

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

### CERTIFICATIONS

CEC

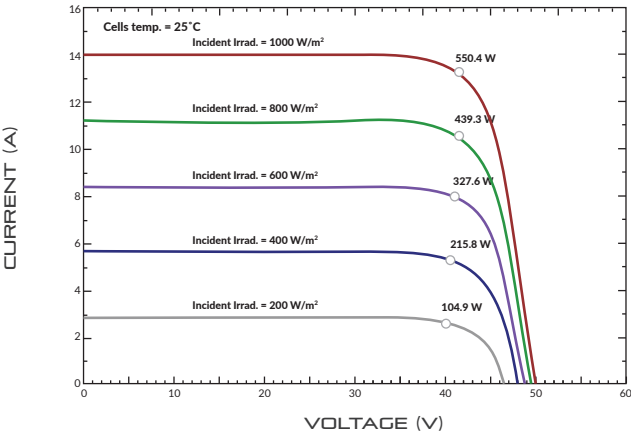
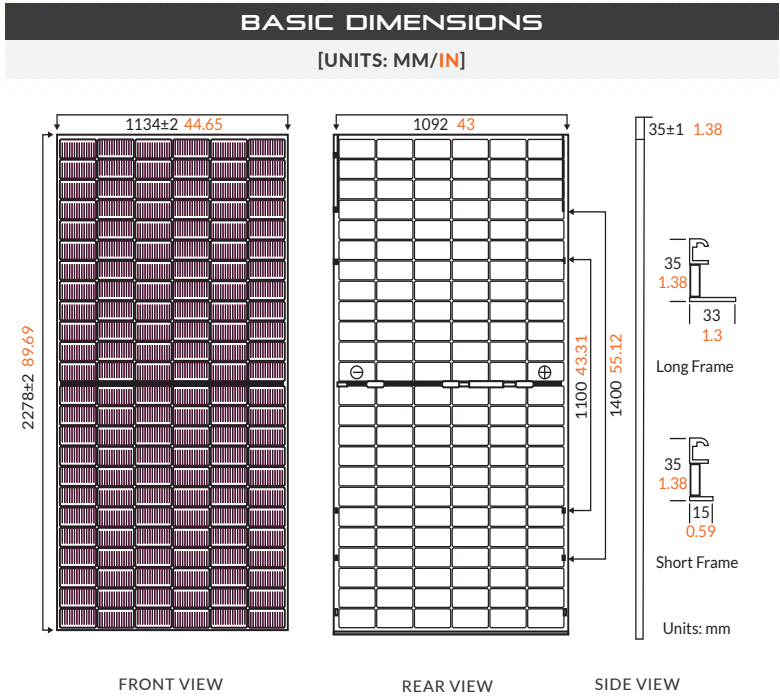


UL 61730 / IEC 61215 / IEC 61730

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

Class Leading  
545-555W

MSI PERC Bifacial 144HC, Transparent Backsheet



CERTIFICATIONS AND TESTS

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



Mission Solar Energy

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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(%)	26.36	26.63	26.86

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	45°C (±2%)
Temperature Coefficient of P <sub>max</sub>	-0.336%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.285%/°C
Temperature Coefficient of I <sub>sc</sub>	0.040%/°C

OPERATING CONDITIONS

Maximum System Voltage	1,500Vdc
Operating Temperature Rang	-40°F to 185°F (-40°C to +85°C)
Maximum Series Fuse Rating	30A
Fire Safety Classification	UL Type 1
Front & Back Load	Up to 5,400 Pa snow and 2,400 Pa 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 Cell	PERC, 182mm x 91mm, 144 (6x24)
Orientation	144 half-cut cells
Module Dimension	2278(±2mm) x 1134(±2mm) x 35(±1mm)
Weight	62.17 lbs. (28.2kg)
Front Glass	Front 3.2 mm, transparent backsheet
Frame Junction	Anodized aluminum profile
Box Cable	Protection class IP68 with 3 bypass-diodes
Connector	1.2m, wire 4mmx <sup>2</sup> (12AMG)
	Stäubli EVO2 MC4

SHIPPING INFORMATION

Pallet	Modules	550W Bin	Total Weight
20	620	341 kW	39,868.4 lbs. / 18,084 kg
15	465	255.75 kW	29,901.3 lbs. / 13,563 kg

PALLET [31 MODULES]

Weight	Height	Width	Length
1993 lbs. (904 kg)	50 in (1270 mm)	44.5 in (1130 mm)	91.1 in (2313 mm)