PERC Bifacial 144HC

Transparent Backsheet



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®

Positive Power Tolerance -0 to +5W



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

CERTIFICATIONS









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. FRONT VIEW

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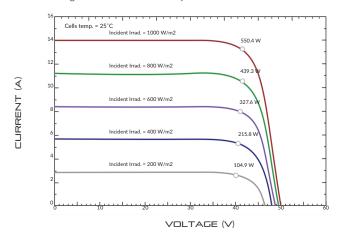
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CURRENT-VOLTAGE CURVE

REAR VIEW

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		









SIDE VIEW

Mission Solar Energy

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

ELECTRICAL SPECIFICATION					
PRODUCT TYPE	MSI10)-xxxH	T4T (xxx=F	Pmax)	
Power Output	Pmax	Wp	545	550	555
Module Efficiency		%	21.30	21.50	21.69
Tolerance		W	0/+5	0/+5	0/+5
Short Circuit Current	Isc	Α	13.92	13.99	14.02
Open Circuit Voltage	Voc	V	49.65	49.80	49.95
Rated Current	Imp	Α	13.04	13.11	13.19
Rated Voltage	Vmp	V	41.80	41.95	42.09
Fuse Rating		Α	30	30	30
System Voltage		V	1,500	1,500	1,500

BIFACIAL OUTPUT REARSIDE POWER GAIN				
5%-Maximum Power (Pmax)	572	578	583	
5%-Module Efficiency STC(%)	22.37	22.57	22.78	
15%-Maximum Power (Pmax)	627	633	638	
15%-Module Efficiency STC(%)	24.30	24.53	24.75	
25%-Maximum Power (Pmax)	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 Pmax	-0.336%/°C		
Temperature Coefficient of Voc	-0.285%/°C		
Temperature Coefficient of Isc	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 4mmx2(12AMG)	
	Staübli EVO2 MC4	

SHIPPING INFORMATION				
Pallet	Modules	550W Bin	Tota	l Weight
20 15	620	341 kW	,	4 lbs./18,084kg
15	465	255.75kW		3 lbs. / 13,563 kg
PALLET [31 MODULES]				
Weight 1993 lbs. (904 kg)	Heig 50 i (1270	in	Width 44.5 in 130 mm)	Length 91.1 in (2313 mm)