MSI PERC Bifacial 144HC

Transparent Backsheet



545-555W

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

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

MSI PERC Bifacial 144HC, Transparent Backsheet

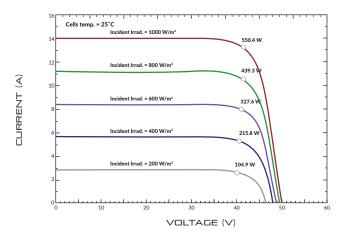
BASIC DIMENSIONS [UNITS: MM/IN] 35±1 1.38 Long Frame 1400 100 Units: mm

CURRENT-VOLTAGE CURVE

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

REAR VIEW

Current-voltage characteristics with dependence on irradiance and module temperature



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









SIDE VIEW

Mission Solar Energy

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ELECTRICAL SPECIFICATION					
PRODUCT TYP	E MSI1	MSI10-xxxHT4T (xxx = P _{max})			
Power Outpu	ıt P _{max}	W_p	545	550	555
Module Efficienc	у	%	21.30	21.50	21.69
Tolerand	е	W	0/+5	0/+5	0/+5
Short Circuit Currer	nt I _{sc}	Α	13.92	13.99	14.02
Open Circuit Voltag	e V _{oc}	V	49.65	49.80	49.95
Rated Currer	nt I _{mp}	Α	13.04	13.11	13.19
Rated Voltag	e V _{mp}	V	41.80	41.95	42.09
Fuse Ratin	g	Α	30	30	30
System Voltag	е	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 COEFF	ICIENTS
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 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 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	PERC, 182mm x 91mm, 144 (6x24)	
Cell Orientation	144 half-cut cells	
Module Dimension	2278(±2mm) x 1134(±2mm) x 35(±1mm)	
Weight	62.17 lbs. (28.2kg)	
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 4mmx² (12AMG)	
Connector	Staübli EVO2 MC4	

SHIPPING INFORMATION					
Pallet	Modules	550W Bin	Tota	al 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	Heig		Width	Length	
1993 lbs.			44.5 in	91.1 in	
(904 kg)	(1270	mm) (:	1130 mm)	(2313 mm)	