### **MSI PERC Bifacial 144HC**

**Transparent Backsheet** 



# 545-555W

Class leading power output



-0 to +5W



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

#### **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

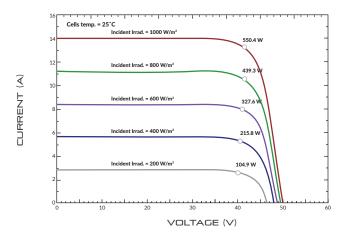
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#### CURRENT-VOLTAGE CURVE

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

REAR VIEW

Current-voltage characteristics with dependence on irradiance and module temperature



CERTIFICATIONS AND TESTS			
MSI10-550HT4T IEC	61215, 61730, 61701		
UL	61730		
10 S 10 S			









SIDE VIEW

## Mission Solar Energy

8303 S. New Braunfels Ave., San Antonio, Texas 78235 www.missionsolar.com | info@missionsolar.com

ELECTRICAL SPECIFICATION					
PRODUCT TYPE	MSI10-xxxHT4T (xxx = P <sub>max</sub> )				
Power Output	P <sub>max</sub>	$W_p$	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	$V_{oc}$	V	49.65	49.80	49.95
Rated Current	Imp	Α	13.04	13.11	13.19
Rated Voltage	$V_{mp}$	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		

<sup>\*</sup>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)		
	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 Height			Width	Length	
1993 lbs. (904 kg)	. 50 i (1270		44.5 in 130 mm)	91.1 in (2313 mm)	