MSI PERC Bifacial 144HC

Dual Glass

MISSION SOLAR

540-550 V

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 +5 W

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
- Hail tests results exceed 25 mm 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 30 with 84.8%. For more information, visit www.missionsolar.com/warranty

CERTIFICATIONS



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

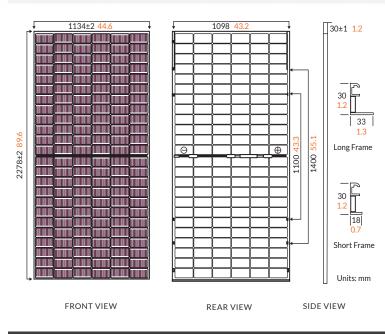
UL 61730 / IEC 61215 / IEC 61730 / IEC 61701

Class Leading 540-550 W

MSI PERC Bifacial 144HC, Dual Glass

BASIC DIMENSIONS

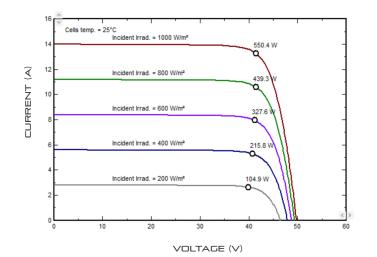
[UNITS: MM/IN]



CURRENT-VOLTAGE CURVE

MSI10-550HT4G, 550 W 144 HALF-CUT CELL SOLAR MODULE

Current-voltage characteristics with dependence on irradiance and module temperature



CERTIFICATIONS AND TESTS

IEC
61215, 61730, 61701

UL
61730

CEC

SUDE

Image: Superior S

Mission Solar Energy

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Mission Solar Energy reserves the right to make specification changes without notice. C-MKTG-0035 VERSION: 1 VERSION DATE: 06/03/2024

ELECTRICAL SPECIFICATION					
PRODUCT TYPE	MSI1	0- <mark>xxx</mark>	HT4G (xxx	= P _{max})	
Power Output	Pmax	Wp	540	545	550
Module Efficiency		%	21.11	21.30	21.50
Tolerance		W	0/+5	0/+5	0/+5
Short Circuit Current	lsc	А	13.85	13.92	13.99
Open Circuit Voltage	Voc	V	49.50	49.65	49.80
Rated Current	Imp	А	12.97	13.04	13.11
Rated Voltage	Vmp	V	41.65	41.80	41.95
Fuse Rating		А	30 A	30 A	30 A
System Voltage		V	1,500	1,500	1,500

BIFACIAL C REARSIDE PC			
5%-Maximum Power (Pmax)	567 W	572 W	583 W
5%-Module Efficiency STC(%)	21.16%	22.37%	22.57%
15%-Maximum Power (Pmax)	621 W	627 W	633 W
15%-Module Efficiency STC(%)	24.27%	24.50%	24.72%
25%-Maximum Power (Pmax)	675 W	681 W	688 W
25%-Module Efficiency STC(%)	26.38%	26.63%	26.63%

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	45°C (±2%)
Temperature Coefficient of Pmax	-0.350%/°C
Temperature Coefficient of Voc	-0.284%/°C
Temperature Coefficient of Isc	0.050%/°C

OPERATING CONDITIONS				
Maximum System Voltage	1,500 Vdc			
Operating Temperature Range	-40°F to 185°F (-40°C to +85°C)			
Maximum Series Fuse Rating	30 A			
Fire Safety Classification	Type 29			
Front & Back Load	Up to 5,400 Pa snow and 2,400 Pa wind load			
Hail Safety Impact Velocity	25 mm at 23 m/s			

*Mission Solar Energy uses quality sourced materials that result in a Type 29 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, 182 mm x 91 mm, 144 (6x24) (Indonesia)		
Cell Orientation	144 half-cut cells		
Module Dimension	2278(±2 mm) x 1134(±2 mm) x 30(±1 mm)		
Weight	71.2 lbs (32.3 g)		
Front / Back Glass	Semi-tempered double glass, 2.0 mm/2.0 mm		
Frame	30 mm Anodized		
Junction Box	Protection class IP68 with 3 bypass-diodes		
Cable	1.2 m, wire 4 mm ² (12 AWG)		
Connector	Staübli EVO2 MC4		

SHIPPING INFORMATION				
Container Feet	Pallets	Modules	550W Bin	Total Weight
40'	20	720	396 kW	52,593 lbs
53'	15	540	286 kW	39,445 lbs

PALLET [36 MODULES]				
	Weight	Height	Width	Length
	2629.6 lbs	50 in	44.5 in	91 in
	(1192.8 kg)	(1271 mm)	(1130 mm)	(2313 mm)

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