

540-550W
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



Advanced Technology

- Half-cut cell with 10 busbar
- Passivated Emitter Rear Contact
- Engineered for C&I and Utility applications



Extreme Weather Resilience

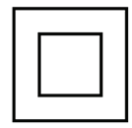
- Up to 5,400 Pa front load & 2,400 Pa back load
- Engineered with good hail resistance
- Excellent resistance to ammonia

FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 2% in year 1 and 0.5% annually from years 2 to 25 with 84.8%. 12-year Material and Workmanship/ 30-year Linear Power Output

For more information, visit www.missionsolar.com/warranty

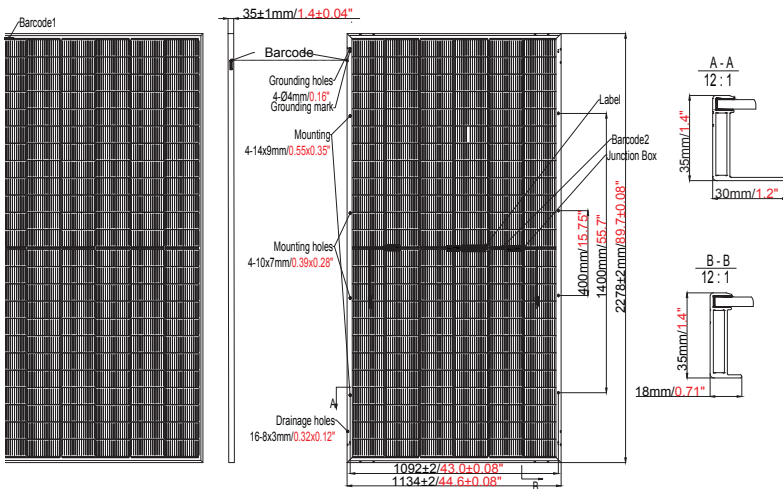
CERTIFICATIONS



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

BASIC DIMENSIONS

[UNITS: MM/IN]



FRONT VIEW

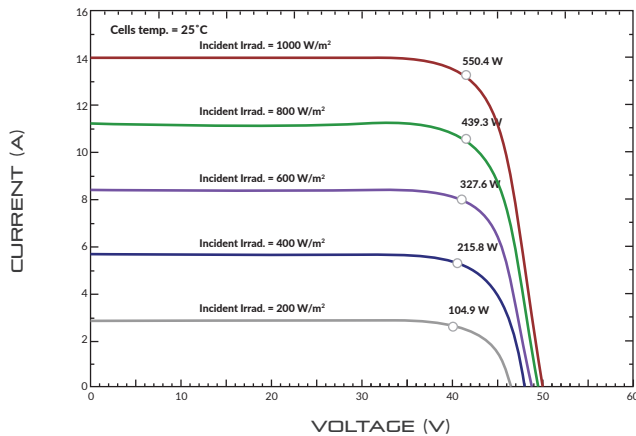
SIDE VIEW

REAR VIEW

CURRENT-VOLTAGE CURVE

MSN10-550HT4T, 144 HALF-CUT CELL SOLAR MODULE

Current-voltage characteristics with dependence on irradiance and module temperature



ELECTRICAL SPECIFICATION

PRODUCT TYPE	MSN10xxxHT4T (xxx = P _{max})		
Power Output	P _{max}	W _p	540 545 550
Module Efficiency	%	20.90 21.10 21.29	
Tolerance	W	0/+5 0/+5 0/+5	
Short Circuit Current	I _{sc}	A	13.77 13.83 13.89
Open Circuit Voltage	V _{oc}	V	49.80 50.00 50.20
Rated Current	I _{mp}	A	13.02 13.07 13.13
Rated Voltage	V _{mp}	V	41.50 41.70 41.90
Fuse Rating	A	30 30 30	
System Voltage	V	1,500 1,500 1,500	

BIFACIAL OUTPUT WITH 25% REAR SIDE POWER GAIN

Front power P _{max}	540 545 550
Total power P _{max}	675 681 688
V _{mp} (Total)	41.6 41.8 42.0
I _{mp} (Total)	16.23 16.30 16.37
V _{oc} (Total)	49.9 50.1 50.3
I _{sc} (Total)	17.17 17.25 17.32

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	44°C (±2%)
Temperature Coefficient of P _{max}	-0.34%/°C
Temperature Coefficient of V _{oc}	-0.29%/°C
Temperature Coefficient of I _{sc}	+0.05%/°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 front/snow and 2,400 Pa back/wind load, Tested to UL 61730
Hail Safety Impact Velocity	2" at 51mph (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

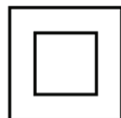
Solar Cells	PERC, 182mm x 91mm, 144 (6x24)
Cell Orientation	144 half-cut cells
Module Dimension	2278(±2mm) x 1134(±2mm) x 35(±1mm)
Weight	61.73 lbs. (28.0 kg)
Front / Back Glass	Front 3.2 mm, transparent backsheet
Frame	Anodized aluminum profile
Junction Box	Protection class IP68 with 3 bypass-diodes
Cable	1.2m, wire 4mm ² (12AMG)
Connector	Stäubli EVO2 MC4

SHIPPING INFORMATION

Container	Pallets	Modules	550W BIN	Total Weight
40'	20	620	341kW	40,565 lbs. / 18,400 kg

PALLET [31 MODULES]

Weight	Height	Width	Length
2029.3 lbs. (920 kg)	50 in (1271 mm)	47.2 in (1120 mm)	90.6 in (2300 mm)



Mission Solar Energy

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