

PERC Bifacial 144HC
Dual Glass



545-555W

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
- 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
- Superior corrosion protection in coastal areas
- Excellent resistance to ammonia

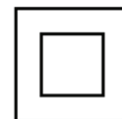
FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 2% in year 1 and 0.55% annually from years 2 to 25 with 84.8%.

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

CERTIFICATIONS

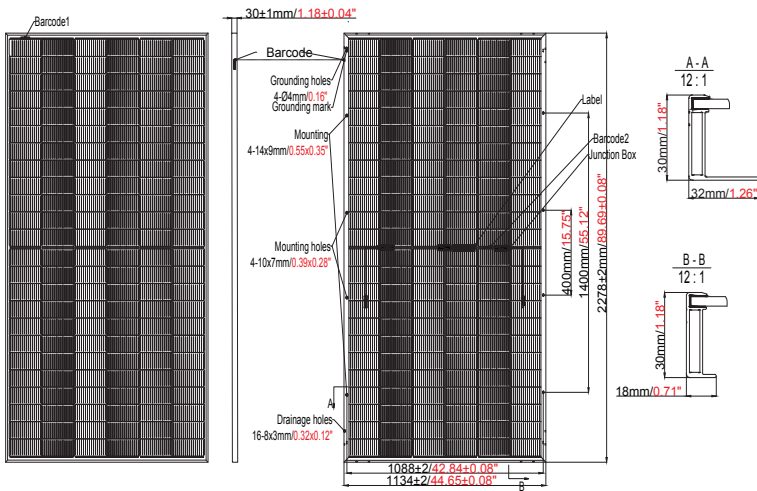
CEC



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

BASIC DIMENSIONS

[UNITS: MM/IN]

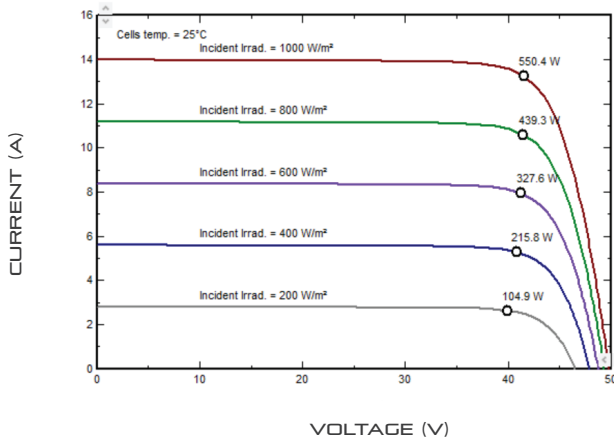


FRONT VIEW SIDE VIEW REAR VIEW

CURRENT-VOLTAGE CURVE

MSN10-550HT4G, 144 HALF-CUT CELL SOLAR MODULE

Current-voltage characteristics with dependence on irradiance and module temperature



ELECTRICAL SPECIFICATION

PRODUCT TYPE	MSN10xxxHT4G (xxx = P _{max})		
Power Output	P _{max}	W _p	545 550 555
Module Efficiency	%		21.10 21.29 21.48
Tolerance	W	0/+5	0/+5 0/+5
Short Circuit Current	I _{sc}	A	13.83 13.89 13.95
Open Circuit Voltage	V _{oc}	V	50.00 50.20 50.40
Rated Current	I _{mp}	A	13.07 13.13 13.19
Rated Voltage	V _{mp}	V	41.70 41.90 42.10
Fuse Rating	A		30A 30A 30A
System Voltage	V		1,500 1,500 1,500

BIFACIAL OUTPUT WITH 25% REAR SIDE POWER GAIN

Front power P _{max}	545	550	555
Total power P _{max}	681	688	694
V _{mp} (Total)	41.8	42.0	42.2
I _{mp} (Total)	16.30	16.37	16.44
V _{oc} (Total)	50.1	50.3	50.5
I _{sc} (Total)	17.25	17.32	17.39

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	44°C (±2%)
Temperature Coefficient of P _{max}	-0.32%/°C
Temperature Coefficient of V _{oc}	-0.29%/°C
Temperature Coefficient of I _{sc}	0.045%/°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, Tested to UL 61730
Hail Safety Impact Velocity	2" at 51 mph (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 30(±1mm)
Weight	69.45 lbs. (31.5kg)
Front / Back Glass	Single glass, 3.2mm AR coated tempered glass
Frame	30mm Anodized
Junction Box	Protection class IP68 with 3 bypass-diodes
Cable	1.2m, wire 4mmx ² (12AMG)
Connector	Stäubli EVO2 MC4

SHIPPING INFORMATION

Container	Pallet	Modules	550W BIN	Total Weight
40'	20	720	396 kW	51,588 lbs. / 23,400 kg

PALLET [36 PANELS]

Weight	Height	Width	Length
2759.4 lbs. (1170 kg)	50 in (1271 mm)	47.2 in (1120 mm)	90.6 in (2300 mm)

Mission Solar Energy

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