

MSI 144HC

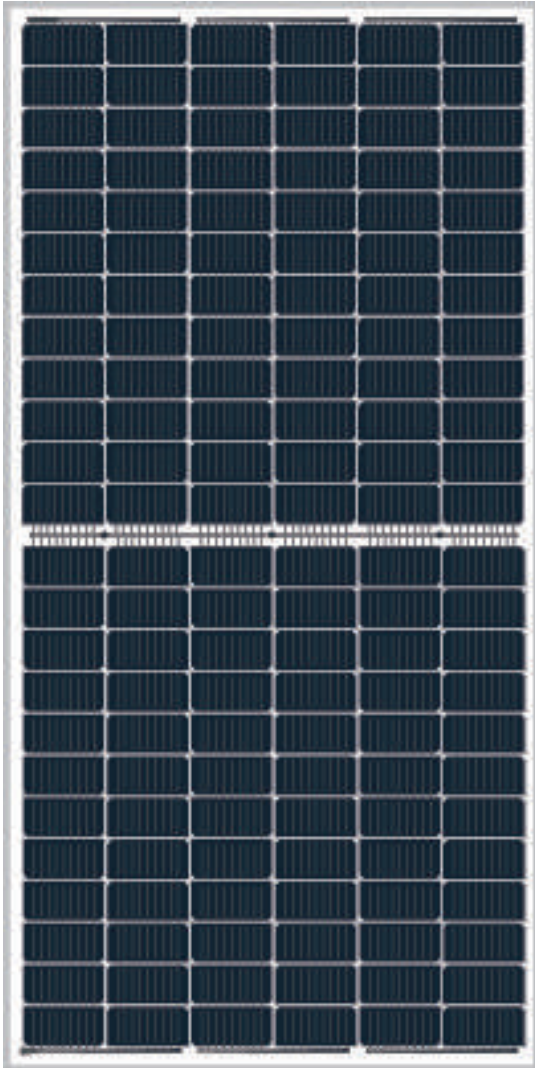
MISSION SOLAR ENERGY



550W

Positive
Power
Tolerance

Class leading power output **-0 to +3%**



PERC Cells Dual Glass

Mission Solar Energy is headquartered in San Antonio, Texas. Our product line is tailored for residential, commercial and utility applications. Every Mission Solar Energy solar module is certified and surpasses industry standard regulations, proving excellent performance over the long term.

Demand the best. Demand Mission Solar Energy.



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
- Ideal for utility applications



Extreme Weather Resilience

- Up to 5,400 Pa front load & 2,400 Pa back load
- Tested load to UL 61730
- Dia. 25mm Hailstone tests at the speed of 24m/s

FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 2% in year one and 0.45% annually from years two to 30 with 84.95%.

CERTIFICATIONS

CEC

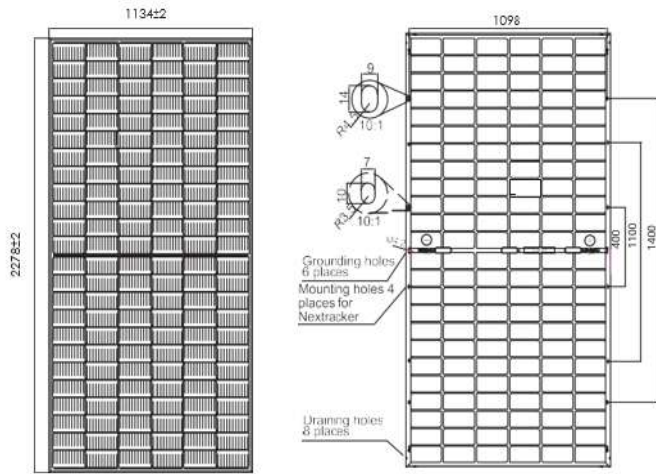


UL 61730 / IEC 61215 / IEC 61730

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

BASIC DIMENSIONS

[UNITS: MM/IN]



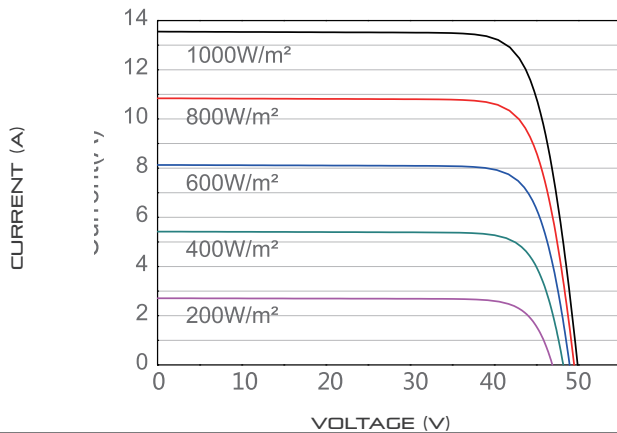
FRONT VIEW

REAR VIEW

CURRENT-VOLTAGE CURVE

MSI10-545HT4G, 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



ELECTRICAL SPECIFICATION

| PRODUCT TYPE | MSI10-xxxHT4G (xxx = P _{max}) | | | | |
|-----------------------|---|----------------|-------|-------|-------|
| Power Output | P _{max} | W _p | 545 | 550 | 555 |
| Module Efficiency | % | | 21.01 | 21.21 | 21.39 |
| Tolerance | % | | 0/+3% | 0/+3% | 0/+3% |
| Short Circuit Current | I _{sc} | A | 13.92 | 13.99 | 14.02 |
| Open Circuit Voltage | V _{oc} | V | 49.65 | 49.80 | 49.95 |
| Rated Current | I _{mp} | A | 13.04 | 13.11 | 13.18 |
| Rated Voltage | V _{mp} | V | 41.80 | 41.95 | 42.09 |
| Fuse Rating | A | | 30A | 30A | 30A |
| System Voltage | V | | 1,500 | 1,500 | 1,500 |

TEMPERATURE COEFFICIENTS

| | |
|---|------------|
| Normal Operating Cell Temperature (NOCT) | 45°C (±2%) |
| Temperature Coefficient of P _{max} | -0.350%/°C |
| Temperature Coefficient of V _{oc} | -0.270%/°C |
| Temperature Coefficient of I _{sc} | 0.048%/°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 29 |
| 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 | 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 1135(±2mm) x 35(±1mm) |
| Weight | 60.0 lbs. (27.2kg) |
| Front Glass | semi-tempered double glass, 2.0mm/2.0mm |
| Frame | 35mm Anodized |
| Junction Box | Protection class IP68 with 3 bypass-diodes |
| Cable | 1.2m, wire 4mmx2 (12AMG) |
| Connector | MC4 EVO2 |

SHIPPING INFORMATION

| | | | | |
|----------------|-------------|--------|--------|-----------|
| Container Feet | Ship To | Pallet | Panels | 550W Bin |
| 40' | Most States | 22 | 682 | 375.10 kW |

PALLET [31 PANELS]

| | | | |
|------------------------|------------------------|---------------------|-----------------------|
| Weight | Height | Width | Length |
| 1,926 lbs. (705 kg) | 50.71 in (117.0 cm) | 46 in (111.0 cm) | 91.3 in (211.5 cm) |

Mission Solar Energy

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