

# MSE PERC 108HC

MISSION SOLAR  
ENERGY

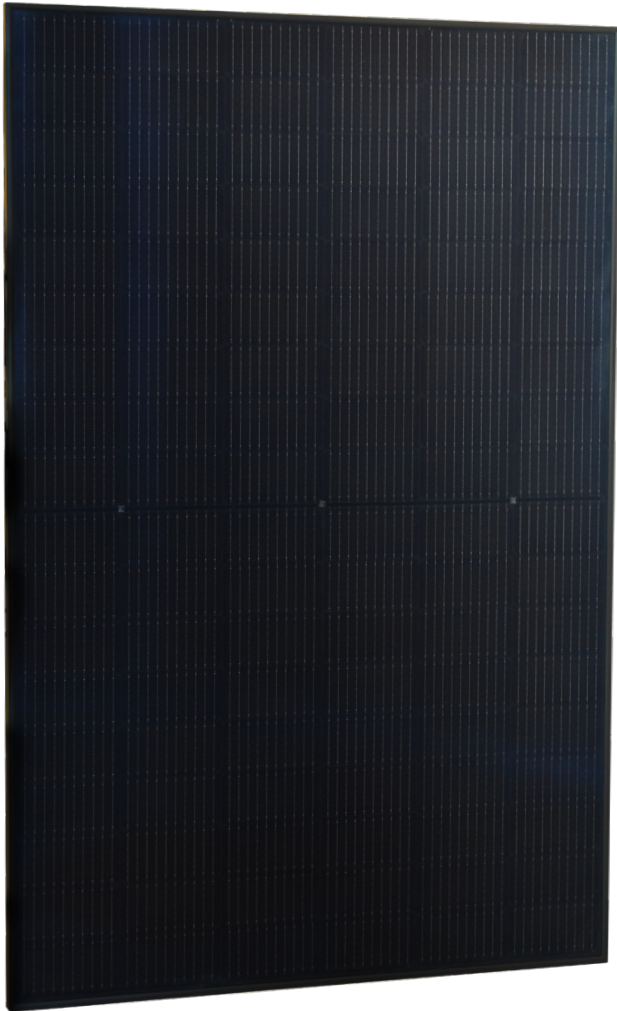


## 410W

Class leading power output

Positive  
Power  
Tolerance

-0 to +3%



## True American Quality True American Brand

Mission Solar Energy is headquartered in San Antonio, Texas where we manufacture our modules. We produce American, high-quality solar modules ensuring the highest-in-class power output and best-in-class reliability. 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 all applications



### Extreme Weather Resilience

- Up to 5,400 Pa front load & 5,400Pa back load
- Tested load to UL 61730
- In-house hail tests exceed 35 mm



### BAA Compliant for Government Projects

- Buy American Act
- American Recovery & Reinvestment Act

### FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 2% in year one and 0.58% annually from years two to 25 with 84.08% capacity guaranteed in year 25.

For more information, visit [www.missionsolar.com/warranty](http://www.missionsolar.com/warranty)

### CERTIFICATIONS

CEC



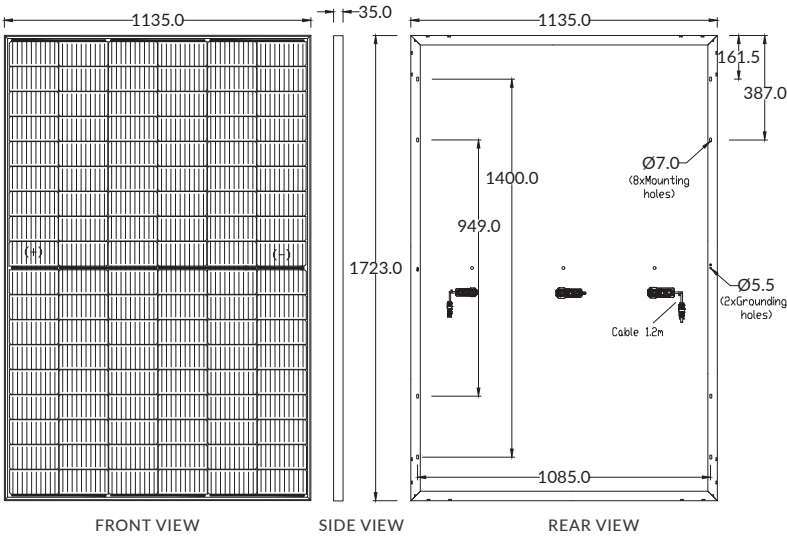
If you have questions or concerns about certification of our products in your area, please contact Mission Solar Energy.

UL 61730 / IEC 61215 / IEC 61730 / IEC 61701



## BASIC DIMENSIONS

[UNITS: MM/IN]



## ELECTRICAL SPECIFICATION

| PRODUCT TYPE          | MSExxxHT0B (xxx = P <sub>max</sub> ) |                |       |       |       |
|-----------------------|--------------------------------------|----------------|-------|-------|-------|
| Power Output          | P <sub>max</sub>                     | W <sub>p</sub> | 400   | 405   | 410   |
| Module Efficiency     | %                                    |                | 20.5  | 20.7  | 21.0  |
| Tolerance             | %                                    |                | 0/+3  | 0/+3  | 0/+3  |
| Short Circuit Current | I <sub>sc</sub>                      | A              | 13.75 | 13.82 | 13.90 |
| Open Circuit Voltage  | V <sub>oc</sub>                      | V              | 37.09 | 37.27 | 37.41 |
| Rated Current         | I <sub>mp</sub>                      | A              | 12.92 | 13.00 | 13.07 |
| Rated Voltage         | V <sub>mp</sub>                      | V              | 30.96 | 31.16 | 31.38 |
| Fuse Rating           | A                                    |                | 25A   | 25A   | 25A   |
| System Voltage        | V                                    |                | 1,000 | 1,000 | 1,000 |

## TEMPERATURE COEFFICIENTS

|   |                 |
|---|-----------------|
| Normal Operating Cell Temperature (NOCT)    | 45.52°C (±3.7%) |
| Temperature Coefficient of P <sub>max</sub> | -0.343%/°C      |
| Temperature Coefficient of V <sub>oc</sub>  | -0.254%/°C      |
| Temperature Coefficient of I <sub>sc</sub>  | 0.027%/°C       |

## OPERATING CONDITIONS

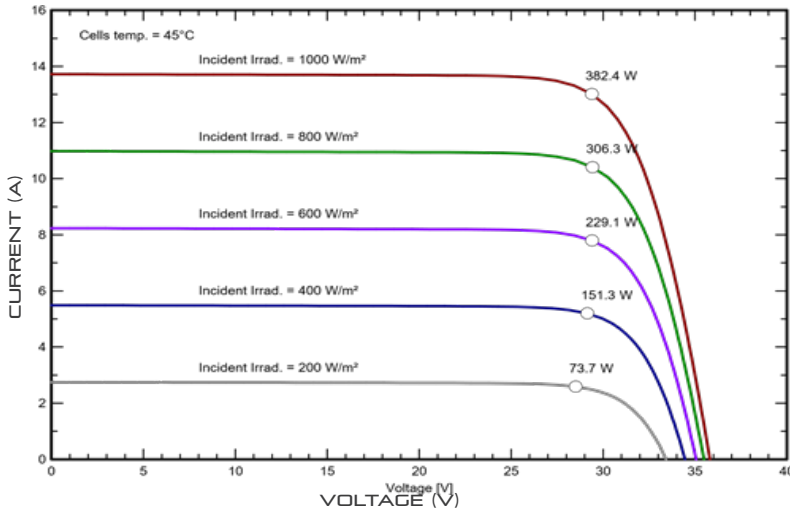
|                                 |   |
|---------------------------------|---|
| Maximum System Voltage          | 1,000Vdc  |
| Operating Temperature Range     | -40°F to 185°F (-40°C to +85°C)                                 |
| Maximum Series Fuse Rating      | 25A   |
| Fire Safety Classification      | Type 1*   |
| Front & Back Load (UL Standard) | Up to 5,400 Pa front and 5,400 Pa back 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.

## CURRENT-VOLTAGE CURVE

MSE410HT0B: 410W, 108 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



## MECHANICAL DATA

|                  |   |
|------------------|---|
| Solar Cells      | P-type mono-crystalline silicon               |
| Cell Orientation | 108 half-cut cells                            |
| Module Dimension | 1723mm x 1135mm x 35mm                        |
| Weight           | 42 lbs. (19kg)                                |
| Front Glass      | 3.2mm tempered, low-iron, anti-reflective     |
| Frame            | 35mm Anodized                                 |
| Encapsulant      | Ethylene vinyl acetate (EVA)                  |
| Junction Box     | Protection class IP67 with 3 bypass-diodes    |
| Cable            | 1.2m, Wire 4mm <sup>2</sup> (12AWG)           |
| Connector        | MC4 Staubli PV-KBT4/6II-UR and PV-KST4/6II-UR |

## SHIPPING INFORMATION

| Container Feet | Ship To     | Pallet | Panels | 405W Bin  |
|----------------|-------------|--------|--------|-----------|
| 53'            | Most States | 30     | 780    | 315.90 kW |
| Double Stack   | CA          | 26     | 676    | 273.78 kW |

## PALLET [26 PANELS]

|                        |                         |                      |                      |
|------------------------|-------------------------|----------------------|----------------------|
| Weight                 | Height                  | Width                | Length               |
| 1,300 lbs.<br>(572 kg) | 47.56 in<br>(120.80 cm) | 46 in<br>(116.84 cm) | 77 in<br>(195.58 cm) |

# Mission Solar Energy

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