

# MSE PERC 60

# MISSION SOLAR ENERGY

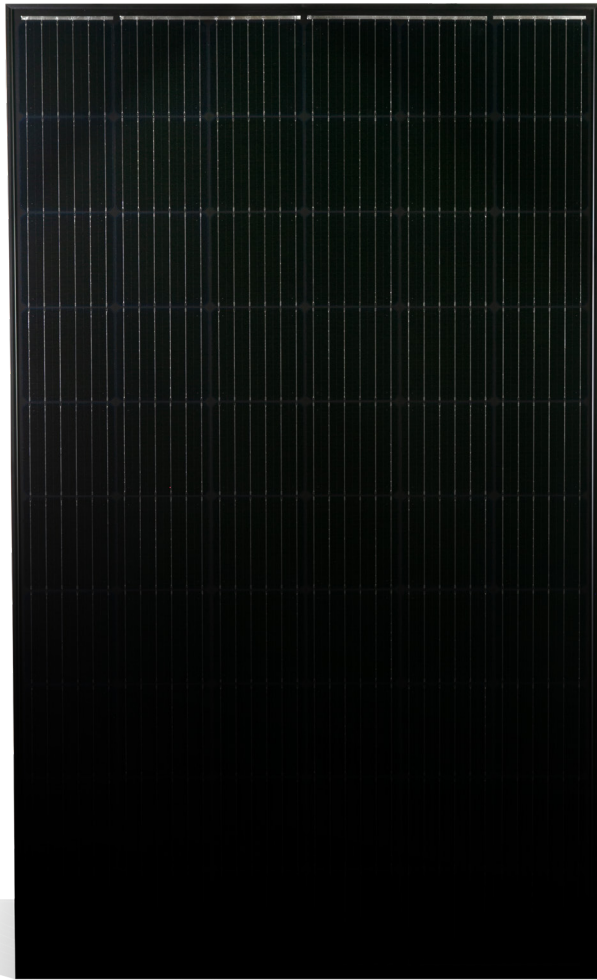


## 345W

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

- 6 Busbar
- Passivated Emitter Rear Contact
- Ideal for all applications



### Extreme Weather Resilience

- Up to 5,600 Pa front load & 5,631 Pa back load
- Tested load to UL 61730
- 40 mm frame



### 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 30 with 84.08% guaranteed in year 25.

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

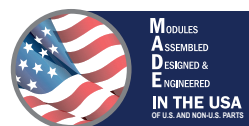
### CERTIFICATIONS

CEC



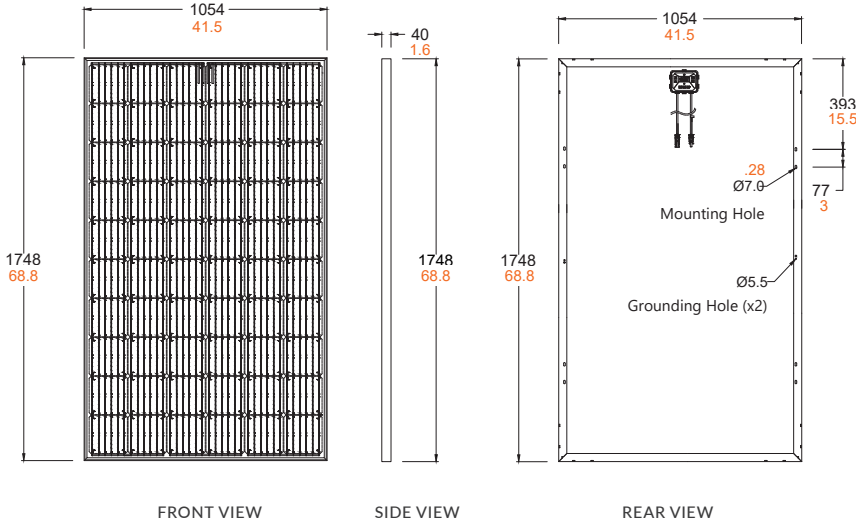
UL 61730 / IEC 61215 / IEC 61730 / IEC 61701

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



**BASIC DIMENSIONS**

[UNITS: MM/IN]



**ELECTRICAL SPECIFICATION**

| PRODUCT TYPE          | MSExxxSX5T (xxx = P <sub>max</sub> ) |                |       |       |       |
|-----------------------|--------------------------------------|----------------|-------|-------|-------|
| Power Output          | P <sub>max</sub>                     | W <sub>p</sub> | 340   | 345   | 350   |
| Module Efficiency     | %                                    |                | 18.5  | 18.7  | 19.0  |
| Tolerance             | %                                    |                | 0/+3  | 0/+3  | 0/+3  |
| Short Circuit Current | I <sub>sc</sub>                      | V              | 10.86 | 10.92 | 10.97 |
| Open Circuit Voltage  | V <sub>oc</sub>                      | A              | 40.82 | 41.00 | 41.18 |
| Rated Current         | I <sub>mp</sub>                      | V              | 10.24 | 10.34 | 10.44 |
| Rated Voltage         | V <sub>mp</sub>                      | V              | 33.20 | 33.37 | 33.52 |
| Fuse Rating           | A                                    |                | 20    | 20    | 20    |
| System Voltage        | V                                    |                | 1,000 | 1,000 | 1,000 |

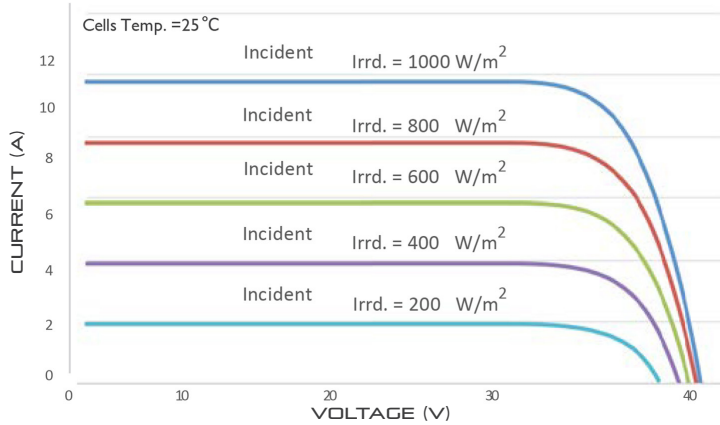
**TEMPERATURE COEFFICIENTS**

|   |                 |
|---|-----------------|
| Normal Operating Cell Temperature (NOCT)    | 44.43°C (±3.7%) |
| Temperature Coefficient of P <sub>max</sub> | -0.361%/°C      |
| Temperature Coefficient of V <sub>oc</sub>  | -0.262%/°C      |
| Temperature Coefficient of I <sub>sc</sub>  | 0.039%/°C       |

**CURRENT-VOLTAGE CURVE**

MSE345SX5T: 345WP, 60 CELL SOLAR MODULE

Current-voltage characteristics with dependence on irradiance and module temperature



**OPERATING CONDITIONS**

|                                 |   |
|---------------------------------|---|
| Maximum System Voltage          | 1,000Vdc  |
| Operating Temperature Range     | -40°C (-40°F) to +85°C (185°F)                                  |
| Maximum Series Fuse Rating      | 20A   |
| Fire Safety Classification      | Type 1  |
| Front & Back Load (UL Standard) | Up to 5,600 Pa front and 5,631 Pa back load, Tested to UL 61730 |
| Hail Safety Impact Velocity     | 25mm at 23 m/s  |

**MECHANICAL DATA**

|                  |  |
|------------------|--|
| Solar Cells      | P-type mono-crystalline silicon                            |
| Cell Orientation | 60 cells (6x10)  |
| Module Dimension | 1748mm x 1054mm x 40mm                                     |
| Weight           | 20.3 kg (44.8 lbs.)  |
| Front Glass      | 3.2mm, tempered, low-iron, anti-reflective                 |
| Frame            | Anodized   |
| Encapsulant      | Ethylene vinyl acetate (EVA)                               |
| Junction Box     | Protection class IP67 with 3 bypass-diodes                 |
| Cable            | 1.0m, Wire 4mm <sup>2</sup> (12AWG)                        |
| Connector        | Staubli PV-KBT4/6II-UR and PV-KST4/6II-UR, MC4, Renhe 05-8 |

**CERTIFICATIONS AND TESTS**

|     |                     |
|-----|---------------------|
| IEC | 61215, 61730, 61701 |
| UL  | 61730               |



CEC



**SHIPPING INFORMATION**

| Container Feet | Ship To     | Pallet | Panels | 345 W Bin |
|----------------|-------------|--------|--------|-----------|
| 53'            | Most States | 34     | 884    | 304.98 kW |
| Double Stack   | CA          | 28     | 728    | 251.16 kW |

**PALLET [26 PANELS]**

|                       |                        |                      |                         |
|-----------------------|------------------------|----------------------|-------------------------|
| Weight                | Height                 | Width                | Length                  |
| 1263 lbs.<br>(573 kg) | 47.5 in<br>(120.65 cm) | 46 in<br>(116.84 cm) | 70.25 in<br>(178.43 cm) |