

# MSE PERC 72

## High Power PERC Module



**Class Leading Output:**  
Up to 365W power



**Advanced Technology:**  
PERC and 4 busbars drive  
>18% module efficiency



**Reduced System Costs:**  
Robust design, 1500V  
and simple installation



**Certified Reliability:**  
3X IEC, salt mist, ammonia

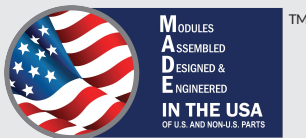


**Buy American Act**



### Proudly assembled in the USA

Mission Solar Energy is headquartered in San Antonio, TX with module facilities onsite. Our hardworking team calls Texas home and is devoted to producing high quality solar products and services. Our supply chain includes local and domestic vendors increasing our impact to the U.S. economy.



## CERTIFICATIONS

IEC 61215/ IEC 61730/ IEC 61701  
UL 1703: CSA



Independently Audited by



\*As there are different certification requirements in different markets, please contact your local Mission Solar Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

### Outstanding performance with PERC

Passivated Emitter Rear Contact (PERC) technology provides excellent power output through advanced cell structure.

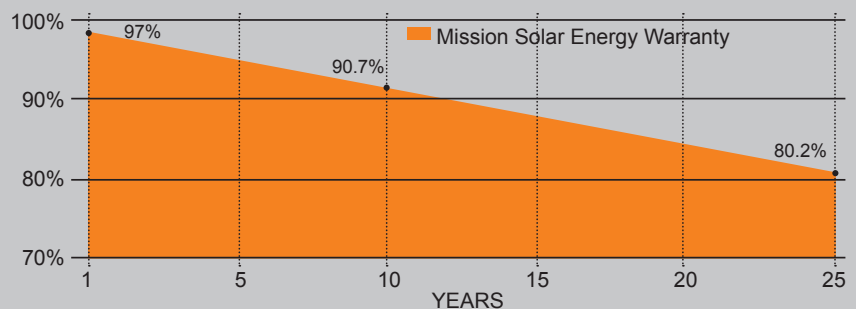
### Best in class quality

Mission Solar Energy production lines are fully automated and include multiple quality checks throughout the production process including 2X EL Testing, 100% Visual inspection, and positive binning.

### Proven reliability and bankability

Mission Solar Energy panels have been tested by independent testing centers to meet and exceed IEC standards. Our panels are deployed in projects across North America.

## 25-YEAR LINEAR WARRANTY



## ELECTRICAL SPECIFICATIONS

Electrical parameters at Standard Test Condition (STC)

| Module Type           |                  |    | MSE355SQ4S | MSE360SQ4S | MSE365SQ4S |
|-----------------------|------------------|----|------------|------------|------------|
| Power Output          | P <sub>max</sub> | Wp | 355        | 360        | 365        |
| Module Efficiency     |                  | %  | 18.05      | 18.36      | 18.46      |
| Tolerance             |                  |    |            | 0~+3%      |            |
| Short-Circuit Current | I <sub>sc</sub>  | A  | 9.76       | 9.79       | 9.81       |
| Open Circuit Voltage  | V <sub>oc</sub>  | V  | 47.68      | 48.08      | 48.12      |
| Rated Current         | I <sub>mp</sub>  | A  | 9.19       | 9.28       | 9.32       |
| Rated Voltage         | V <sub>mp</sub>  | V  | 38.98      | 39.28      | 39.32      |

STC: Irradiance 1000 W/m<sup>2</sup>, Cell temperature of 25°C, AM 1.5

## TEMPERATURE COEFFICIENTS

|   |             |
|---|-------------|
| Normal Operating Cell Temperature (NOCT)    | 44°C (±2°C) |
| Temperature Coefficient of P <sub>max</sub> | -0.377%/°C  |
| Temperature Coefficient of V <sub>oc</sub>  | -0.280%/°C  |
| Temperature Coefficient of I <sub>sc</sub>  | 0.046%/°C   |

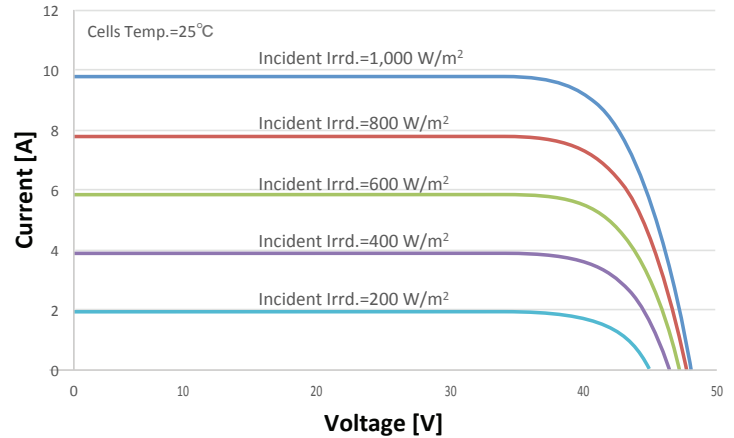
## OPERATING CONDITIONS

|                             |                                |
|-----------------------------|--------------------------------|
| Maximum System Voltage      | 1,500VDC                       |
| Operating Temperature Range | -40°C (-40°F) to +90°C (194°F) |
| Maximum Series Fuse Rating  | 15A                            |
| Fire Safety Classification  | Type 1, Class C                |
| Static Load Wind/Snow       | 5600Pa                         |
| Hail Safety Impact Velocity | 25mm at 23 m/s                 |

## MECHANICAL DATA

|                  |  |
|------------------|--|
| Solar Cells      | P-type Mono-crystalline Silicon (156.75mm)                       |
| Cell orientation | 72 cells (6x12), 4 busbar  |
| Module dimension | 1987mm x 999mm x 40mm<br>(78.23 in. x 39.33 in. x 1.57 in.)      |
| Weight           | 21.6 kg (47.6 lb)  |
| Front Glass      | 3.2mm (0.126 in.) tempered,<br>Low-iron, Anti-reflective coating |
| Frame            | Anodized aluminum alloy  |
| Encapsulant      | Ethylene vinyl acetate (EVA)                                     |
| J-Box            | Protection class IP67 with 3 bypass-diodes                       |
| Cables           | PV wire, 1.2m (47.24 in.), 4mm <sup>2</sup> / 12 AWG             |
| Connector        | MC4 or compatible  |

## MSE360SQ4S: 360WP, 72CELL SOLAR MODULE CURRENT-VOLTAGE CURVE



Current-voltage characteristics with dependence on irradiance and module temperature

## BASIC DESIGN (UNITS: mm)

