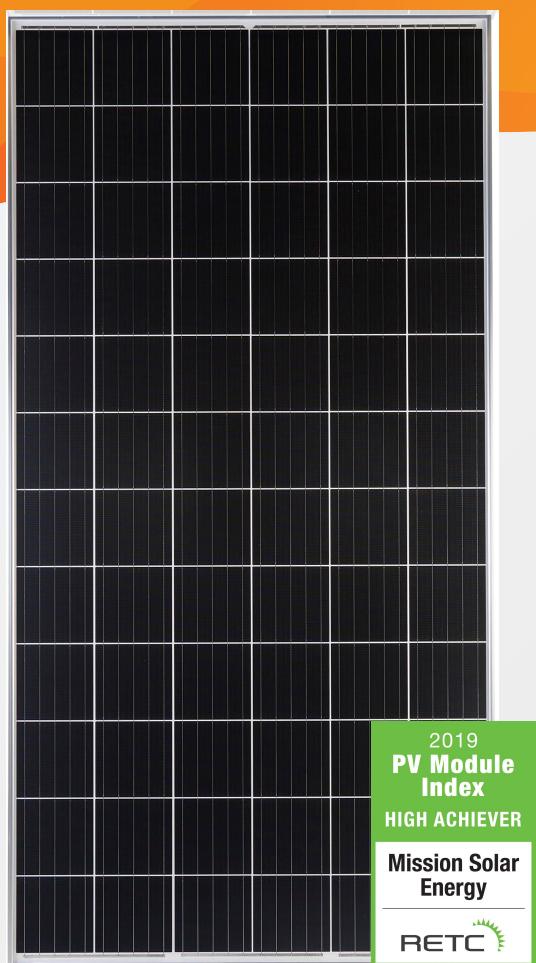


AMERICA'S MODULE COMPANY™

MSE PERC 72



CERTIFIED RELIABILITY

- › Tested to UL1703 & IEC standards
- › PID resistant



ADVANCED TECHNOLOGY

- › PERC and 5 busbar drive >19.3% module efficiency
- › Ideal for all applications



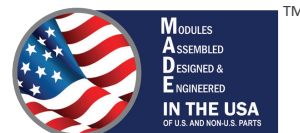
EXTREME WEATHER RESILIENCE

- › 5631 Pa front and back load (117 psf) tested load to UL1703

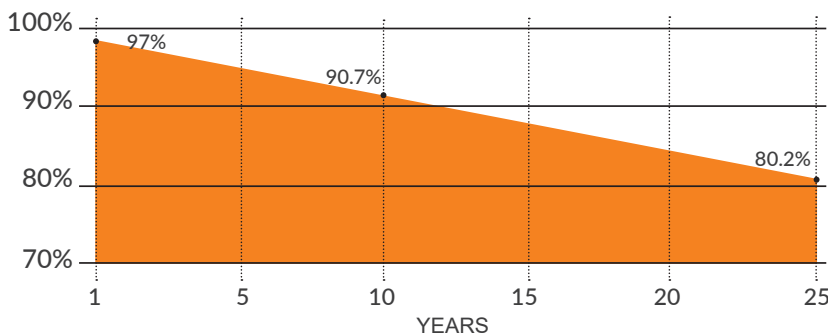


BAA COMPLIANT FOR GOVERNMENT PROJECTS

- › Buy American Act
- › American Recovery & Reinvestment Act



FRAME-TO-FRAME WARRANTY™



380-390W

CLASS LEADING POWER OUTPUT

19.35%

MAXIMUM EFFICIENCY

-0~+3%

POSITIVE POWER TOLERANCE

The True American Brand

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

CERTIFICATIONS

IEC 61215 - IEC 61730 - IEC 61701 - UL 1703 - Salt mist



CEC



Please contact Mission Solar Energy if you have questions or concerns about certification of our products in your area.

*Standard 12-year product warranty extendable to 25 years with registration:
<https://www.missionsolar.com/warranty/>



ELECTRICAL SPECIFICATIONS

Electrical Parameters at Standard Test Conditions (STC)

| Module Type | | | MSE375SR9S | MSE380SR9S | MSE385SR9S | MSE390SR9S |
|-----------------------|------|----|------------|------------|------------|------------|
| Power Output | Pmax | Wp | 375 | 380 | 385 | 390 |
| Module Efficiency | | % | 18.61 | 18.86 | 19.11 | 19.35 |
| Tolerance | | | 0~+3% | 0~+3% | 0~+3% | 0~+3% |
| Short-Circuit Current | Isc | A | 9.939 | 9.966 | 9.993 | 10.024 |
| Open Circuit Voltage | Voc | V | 48.02 | 48.31 | 48.53 | 48.96 |
| Rated Current | Imp | A | 9.360 | 9.385 | 9.426 | 9.499 |
| Rated Voltage | Vmp | V | 40.06 | 40.49 | 40.84 | 41.05 |
| Fuse Rating | | | 20 | 20 | 20 | 20 |

TEMPERATURE COEFFICIENTS

| | |
|--|----------------|
| Normal Operating Cell Temperature (NOCT) | 46.43°C (±2°C) |
| Temperature Coefficient of Pmax | -0.375% / °C |
| Temperature Coefficient of Voc | -0.280% / °C |
| Temperature Coefficient of Isc | 0.045% / °C |

OPERATING CONDITIONS

| | |
|---------------------------------|--|
| Maximum System Voltage | 1,500Vdc or 1000Vdc |
| Operating Temperature Range | -40°C (-40°F) to +85°C (185°F) |
| Maximum Series Fuse Rating | 20A |
| Fire Safety Classification | Type 1, Class C |
| Front & Back Load (UL standard) | 5631 Pa (117 psf) Tested to UL1703 standard |
| Hail Safety Impact Velocity | 25mm at 23 m/s |

MECHANICAL DATA

| | |
|------------------|--|
| Solar Cells | P-type mono-crystalline silicon (158.75mm) |
| Cell Orientation | 72 cells (6x12), 5 busbar |
| Module Dimension | 1999mm x 1008mm x 40mm (78.7 in. x 39.68 in. x 1.58 in.) |
| Weight | 23 kg (50.7 lb) |
| Front Glass | 3.2mm (0.126 in.) tempered, 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 ² / 12 AWG |
| Connector | MC4 Compatible |

SHIPPING INFORMATION

| Container FT | | Pallets | Panels | 385 W | | |
|--------------|--------------|----------|--------|-----------|--------|--------|
| 53' | Double stack | 30 | 780 | 300.30 kW | | |
| 40' | Double stack | 24 | 624 | 240.24 kW | | |
| | | Panels | Weight | Height | Width | Length |
| Pallet | 26 | 1,414lbs | 42.45" | 45.50" | 79.50" | |

CERTIFICATIONS & TESTS

IEC

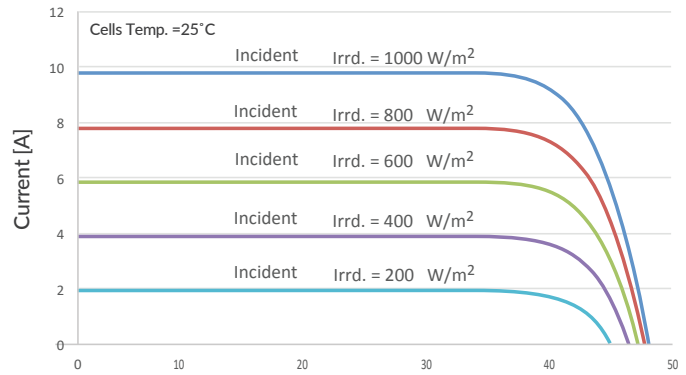
61215 - 61730 - 61701 - Salt mist

UL

UL 1703 listed

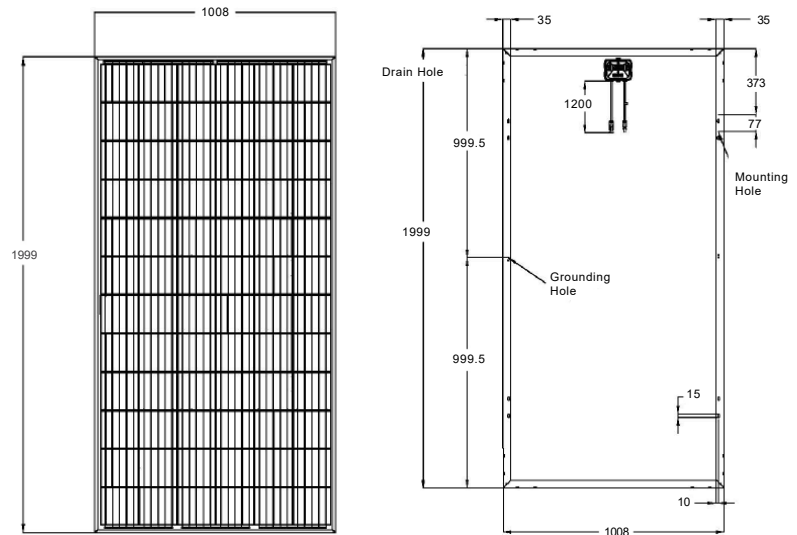


CEC

MSE385SR9S: 385WP, 72 CELL SOLAR MODULE
CURRENT - VOLTAGE CURVE

Current-voltage characteristics with dependence on irradiance and module temperature

BASIC DESIGN (UNITS: mm)



Front View

Back View

