

AMERICA'S MODULE COMPANY™

MSE PERC 72



2019
PV Module Index
HIGH ACHIEVER
Mission Solar Energy
RETc

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.



CERTIFIED RELIABILITY

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



ADVANCED TECHNOLOGY

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



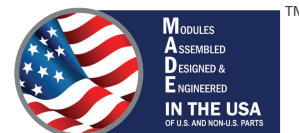
EXTREME WEATHER RESILIENCE

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

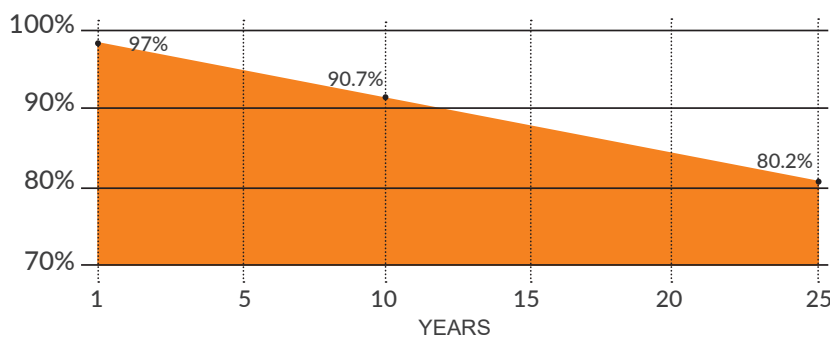


BAA COMPLIANT FOR GOVERNMENT PROJECTS

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



FRAME-TO-FRAME WARRANTY™



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

CERTIFICATIONS & TESTS

IEC

61215 - 61730 - 61701 - Salt mist

UL

UL 1703 listed



CEC



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

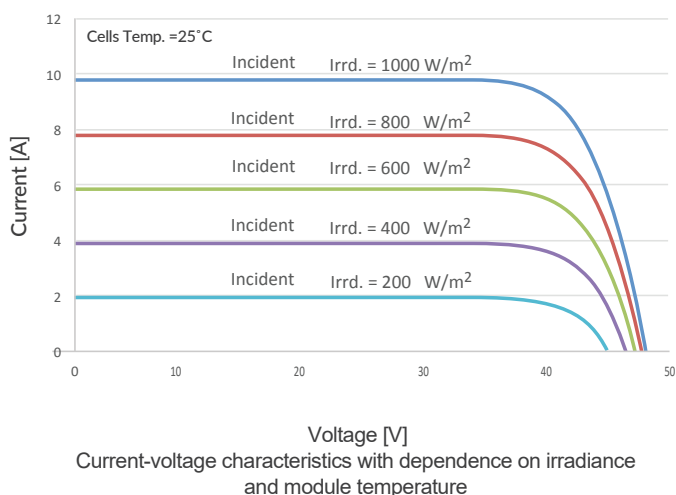
MECHANICAL DATA

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		
Pallet		Panels	Weight	Height	Width	Length
		26	1,414lbs	42.45"	45.50"	79.50"

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



BASIC DESIGN (UNITS: mm)

