# **AMERICA'S MODULE COMPANY**

**MSE PERC 60** 



315-325W

**CLASS LEADING POWER OUTPUT** 

19.24%

**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 >19.2% module efficiency
- > Ideal for residential applications



#### EXTREME WEATHER RESILIENCE

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



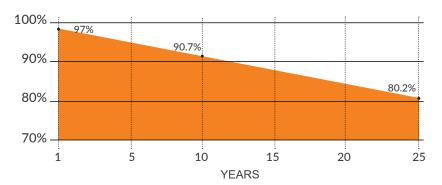
#### BAA COMPLIANT FOR GOVERNMENT PROJECTS

- > 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			MSE315SR8T	MSE320SR8T	MSE325SR8T
Power Output	Pmax	Wp	315	320	325
Module Efficiency		%	18.65	18.94	19.24
Tolerance			0~+3%	0~+3%	0~+3%
<b>Short-Circuit Current</b>	Isc	Α	9.997	10.028	10.060
Open Circuit Voltage	Voc	V	40.44	40.80	41.14
Rated Current	Imp	Α	9.253	9.351	9.387
Rated Voltage	Vmp	V	34.04	34.22	34.62
Fuse Rating			20	20	20

# **CERTIFICATIONS & TESTS**

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





#### TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	46.09°C (±2°C)
Temperature Coefficient of Pmax	-0.377% / °C
Temperature Coefficient of Voc	-0.280% / °C
Temperature Coefficient of Isc	0.039% / °C

# **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, Class C
Front & Back Load (UL standard)	5631 Pa (117 psf) Tested to UL1703 standard
Hail Safety Impact Velocity	25mm at 23 m/s

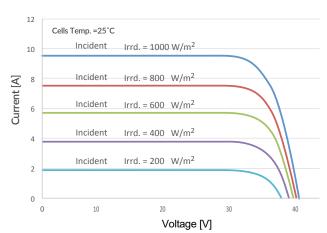
# **MECHANICAL DATA**

Solar Cells	P-type mono-crystalline silicon (158.75mm)			
Cell Orientation	60 cells (6x10), 5 busbar			
Module Dimension	1676mm x 1008mm x 40mm (65.98 in. x 39.68 in. x 1.58 in.)			
Weight	20 kg (44lb)			
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, 1m (39.37 in.), 4mm <sup>2</sup> / 12 AWG			
Connector	MC4 Compatible			

# **SHIPPING INFORMATION**

Container FT		Pallets	Panels	320 W	
53'	Double stack	36	936	299.52 kW	
40'	Double stack	28	728	232.96 kW	
	Panels	Weight	Height	Width	Length
Pallet	26	1,198lbs	42.45"	45.50"	67.00"

#### MSE320SR8T: 320WP, 60 CELL SOLAR MODULE **CURRENT - VOLTAGE CURVE**



Current-voltage characteristics with dependence on irradiance and module temperature

### **BASIC DESIGN (UNITS: mm)**

