# MSE PERC 72

High Power PERC Module





Class Leading Output: Up to 360W power



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



Reduced System Costs: Robust design, 1000V and simple installation



Certified Reliability: 3X IEC, salt mist, ammonia



Buy American Act Compliant

### Proudly assembled in the USA

Mission Solar Energy is headquartered in San Antonio, TX with module facilities onsite. Our team of more than 300 staff call Texas home and are 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 Control (PERC) technology provides excellent power output through advanced cell architecture.

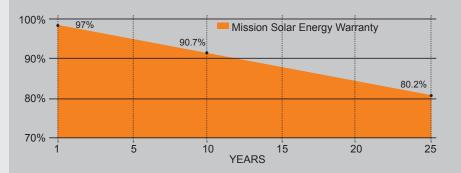
#### Best in class quality

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	[		MSE350SQ4S	MSE355SQ4S	MSE360SQ4S
Power Output	Pmax	Wp	350	355	360
Module Efficiency		%	17.75	18.05	18.36
Tolerance 0~+3%					
Short-Circuit Current	Isc	Α	9.73	9.76	9.79
Open Circuit Voltage	Voc	V	47.38	47.68	48.08
Rated Current	lmp	Α	9.11	9.19	9.28
Rated Voltage	Vmp	V	38.68	38.98	39.28

STC: Irradiance 1000 W/m2, Cell temperature of 25°C, AM 1.5

#### **TEMPERATURE COEFFICIENTS**

Normal Operating Cell Temperature (NOCT)	44°C (±2°C)
Temperature Coefficient of Pmax	-0.377%/°C
Temperature Coefficient of Voc	-0.280%/°C
Temperature Coefficient of Isc	0.046%/°C

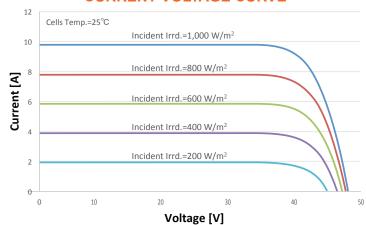
#### **OPERATING CONDITIONS**

Maximum System Voltage	1,000VDC
Operating Temperature Range	-40°C (-40°F) to +90°C (194°F)
Maximum Series Fuse Rating	15A
Fire Safety Classification	Type 2, Class C
Static Load Wind/Snow	2400Pa/5400Pa
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 (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, 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 or MC4 compatible		

# MSE355SQ4S: 355WP, 72CELL SOLAR MODULE CURRENT-VOLTAGE CURVE



Current-voltage characteristics with dependence on irradiance and module temperature

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

