# **MSE PERC 60**

### High Power PERC Rooftop Module





Class Leading Output: 300W power

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



Superior Aesthetics: All-black design coupled with outstanding power output



Certified Reliability: 3X IEC, salt mist, ammonia



5600 Pa snow load **New!** 175 mph wind rating



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



\*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.



#### **Superior Aesthetics**

MSE PERC 60's slick all-black design coupled with outstanding power output makes it ideal for DG installations including commercial and rooftop systems.

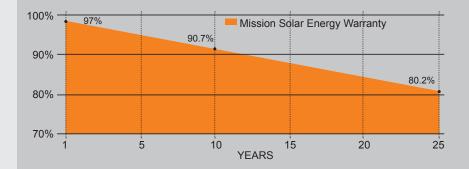
#### **Outstanding performance with PERC**

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.

## 25-YEAR LINEAR WARRANTY



#### **ELECTRICAL SPECIFICATIONS**

Electrical parameters at Standard Test Condition (STC)

Module Type			MSE290SQ5T	MSE295SQ5T	MSE300SQ5T
Power Output	Pmax	Wp	290	295	300
Module Efficiency		%	17.45	17.75	18.05
Tolerance				0~+3%	
Short-Circuit Current	lsc	Α	9.44	9.52	9.61
Open Circuit Voltage	Voc	V	39.81	40.11	40.18
Rated Current	Imp	Α	8.95	9.03	9.17
Rated Voltage	Vmp	V	32.54	32.72	32.80
••••••	• • • • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		••••••••••••••••••

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	-0.427%/°C
Temperature Coefficient of Voc	-0.318%/°C
Temperature Coefficient of Isc	0.042%/°C

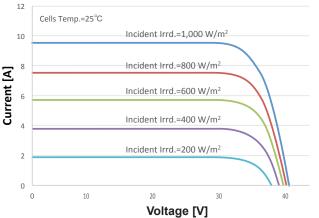
#### **OPERATING CONDITIONS**

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 1, Class C
Front & Back Load (UL standard)	5600 Pa (117 psf) <b>New!</b>
Hail Safety Impact Velocity	25mm at 23 m/s

#### **MECHANICAL DATA**

Solar Cells P-type Mono-crystalline Silicon (156.75mm)	
Cell orientation 60 cells (6x10), 4 busbar	
Module dimension 1664mm x 999mm x 40mm (65.51 in. x 39.33 in. x 1.57 in.)	
Weight 18.2 kg (40.1 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 compatible	

#### MSE295SQ5T: 295WP, 60CELL SOLAR MODULE **CURRENT-VOLTAGE CURVE**



Current-voltage characteristics with dependence on irradiance and module temperature

#### 999.00 - 35.00 35.00 437.00 - - 296.50 Drain Hole 297.00 77.00 832.00 Mounting Hole 1664.00 1664.00 Grounding Hole 832.00 4.50 15.00 4 7.00 156.75 7.25 4.00 282.00 156.75 10.00 -999.00 **Back View**

Front View



ENERGY

Mission Solar Energy reserves the right to make specification changes without notice.

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

Rev. 7.03