# MSE PERC 60

High Power PERC Rooftop Module





Class Leading Output: 305W power



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



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.



#### Outstanding performance with PERC

Passivated Emitter Rear Contact (PERC) technology provides excellent power output through advanced cell structure.

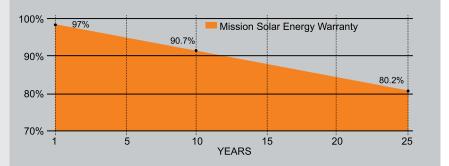
#### Best in class quality

Mission Solar Energy production lines are fully automated and include multiple quality checks throughout the production process.

#### 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			MSE295SQ5K	MSE300SQ5K	MSE305SQ5K
Power Output	Pmax	Wp	295	300	305
Modu <b>l</b> e Efficiency		%	17.82	18.06	18.36
Tolerance				0~+3%	
Short-Circuit Current	Isc	Α	9.73	9.77	9.81
Open Circuit Voltage	Voc	٧	39.38	39.72	39.95
Rated Current	Imp	Α	9.20	9.27	9.36
Rated Voltage	Vmp	٧	32.19	32.38	32.61

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

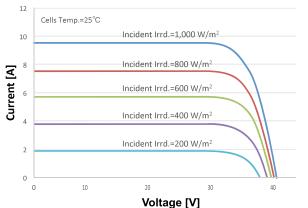
#### **TEMPERATURE COEFFICIENTS**

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

# MSE300SQ5K: 300WP, 60CELL SOLAR MODULE CURRENT-VOLTAGE CURVE

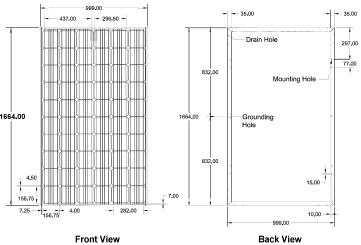


Current-voltage characteristics with dependence on irradiance and module temperature

#### **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		

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





 $\label{eq:mission_solar_energy} \textbf{Mission Solar Energy reserves the right to make specification changes without notice.}$ 

Rev. 7