# ТМ MODULES ASSEMBLED DESIGNED & ENGINEERED IN THE USA

305-315

**CLASS LEADING POWER OUTPUT** 

18.95%

MAXIMUM EFFICIENCY

-0~+3%

POSITIVE POWER TOLERANCE

# High-Power, American Quality

Mission Solar Energy is headquartered in San Antonio, TX with module facilities onsite. We produce American quality products ensuring the highest power output and reliability to our customers. Our product line is well suited for residential, commercial and utility applications. Every Mission Solar Energy product is certified and surpasses industry standard regulations, proving excellent performance over the long-term.

# MSE PERC 60

High Power PERC Rooftop Module

White Backsheet PERC with 5 busbars technology



#### **CERTIFIED RELIABILITY**

- > Tested to 3X IEC Standards
- > PID Resistant



#### ADVANCED TECHNOLOGY

- > PERC and 5 busbar drive >18% module efficiency
- > Ideal for residential & commercial applications



#### EXTREME WEATHER RESILIENCE

- > 5600 Pa snow load (117 psf)
- > 175 mph wind rating



#### BAA COMPLIANT FOR GOVERNMENT PROJECTS

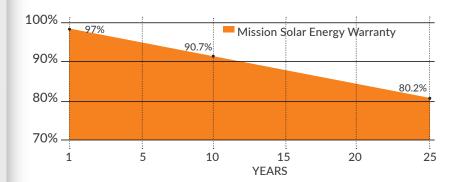
- > Buy American Act
- > American Recovery & Reinvestment Act







PRODUCT WARRANTY



#### **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.



# **ELECTRICAL SPECIFICATIONS**

**Electrical Parameters at Standard Test Conditions (STC)** 

Module Type			MSE305SQ8K	MSE310SQ8K	MSE315SQ8K
Power Output	Pmax	Wp	305	310	315
Module Efficiency		%	18.35	18.65	18.95
Tolerance			0~+3%	0~+3%	0~+3%
Short-Circuit Current	Isc	Α	9.723	9.819	9.917
Open Circuit Voltage	Voc	V	39.96	40.09	40.13
Rated Current	Imp	Α	9.238	9.362	9.465
Rated Voltage	Vmp	V	33.02	33.11	33.28
Fuse Rating			20	20	20

# **CERTIFICATIONS & TESTS**

IEC
61215 / 61730 / 61701, Salt mist
UL
UL 1703 listed











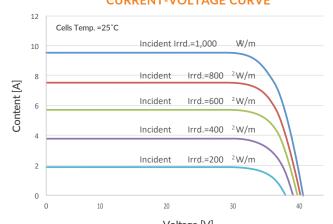
# TEMPERATURE COEFFICIENTS

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	20A		
Fire Safety Classification	Type 1, Class C		
Front & Back Load (UL standard)	5600 Pa (117 psf)		
Hail Safety Impact Velocity	25mm at 23 m/s		

#### MSE315SQ8K: 315WP, 60CELL SOLAR MODULE **CURRENT-VOLTAGE CURVE**

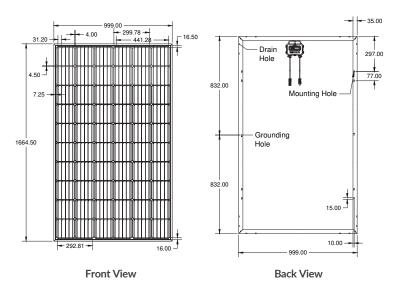


Voltage [V] Current-voltage characteristics with dependence on irradiance and module temperature

# **MECHANICAL DATA**

Solar Cells	P-type Mono-crystalline Silicon (156.75mm)	
Cell orientation	60 cells (6x10), 5 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)**



# SHIPPING INFORMATION

Container FT		Pallets	Panels	305 W	
53'	Double stack	36	936	285.48 kW	
40'	Double stack	28	728	222.04 kW	
	Panels	Weight	Height	Width	Length
Pallet	26	1,160lbs	45.15"	45.00"	66.00

