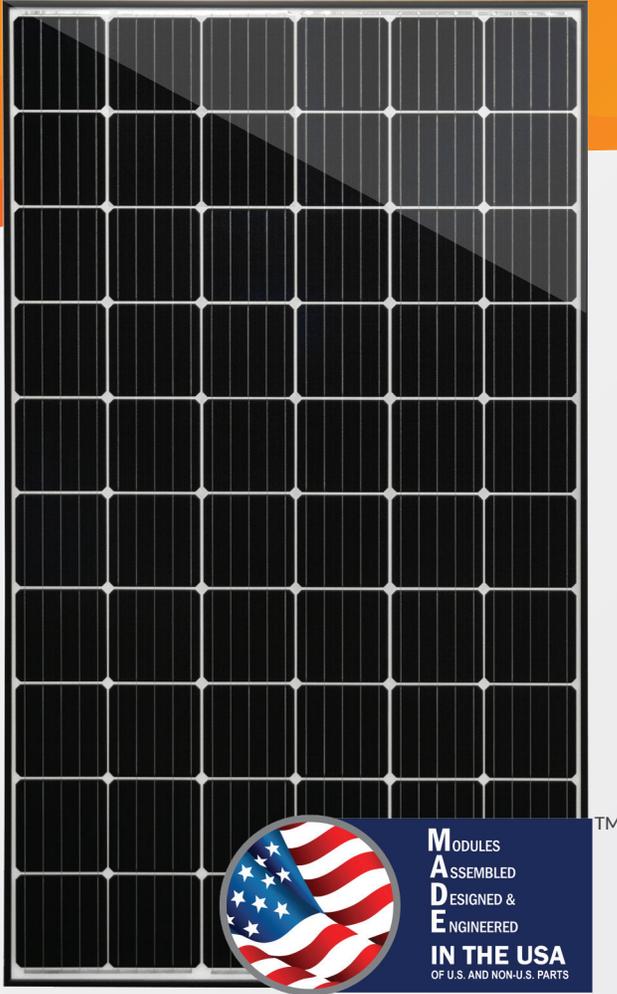


# MSE PERC 60

High Power PERC Rooftop Module

White Backsheet PERC with 5 busbars technology



## CERTIFIED RELIABILITY

- › Tested to UL1703 & IEC standards
- › PID Resistant



## ADVANCED TECHNOLOGY

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



## EXTREME WEATHER RESILIENCE

- › 5631Pa snow load (117 psf) tested load to UL1703
- › 185 mph wind rating\*



## BAA COMPLIANT FOR GOVERNMENT PROJECTS

- › Buy American Act
- › American Recovery & Reinvestment Act



LINEAR WARRANTY



PRODUCT WARRANTY

# 305-315W

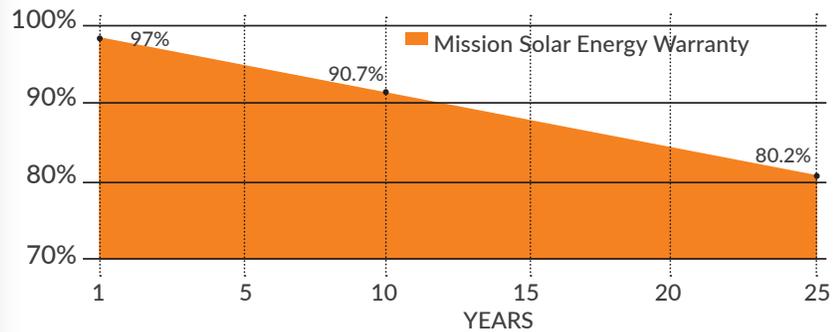
CLASS LEADING POWER OUTPUT

# 18.95%

MAXIMUM EFFICIENCY

# -0~+3%

POSITIVE POWER TOLERANCE



## CERTIFICATIONS

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



CEC

\*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.

\*185 mph wind rating based upon installation at 30° fixed tilt mount

## 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.



## ELECTRICAL SPECIFICATIONS

Electrical Parameters at Standard Test Conditions (STC)

Module Type			MSE305SQ8K	MSE310SQ8K	MSE315SQ8K
Power Output	P <sub>max</sub>	W <sub>p</sub>	305	310	315
Module Efficiency		%	18.35	18.65	18.95
Tolerance			0 <sup>-</sup> +3%	0 <sup>-</sup> +3%	0 <sup>-</sup> +3%
Short-Circuit Current	I <sub>sc</sub>	A	9.723	9.819	9.917
Open Circuit Voltage	V <sub>oc</sub>	V	39.96	40.09	40.13
Rated Current	I <sub>mp</sub>	A	9.238	9.362	9.465
Rated Voltage	V <sub>mp</sub>	V	33.02	33.11	33.28
Fuse Rating			20	20	20

## TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	46.43°C (±2°C)
Temperature Coefficient of P <sub>max</sub>	-0.375%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.280%/°C
Temperature Coefficient of I <sub>sc</sub>	0.045%/°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 2, Class C
Front & Back Load (UL standard)	5631Pa (117 psf) Tested to UL1703 standar
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), 5 busbar
Module dimension	1664mm x 999mm x 40mm (65.53 in. x 39.33 in. x 1.58 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

## 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	1,105lbs	45.50"	45.50"	67.00"

## CERTIFICATIONS & TESTS

IEC

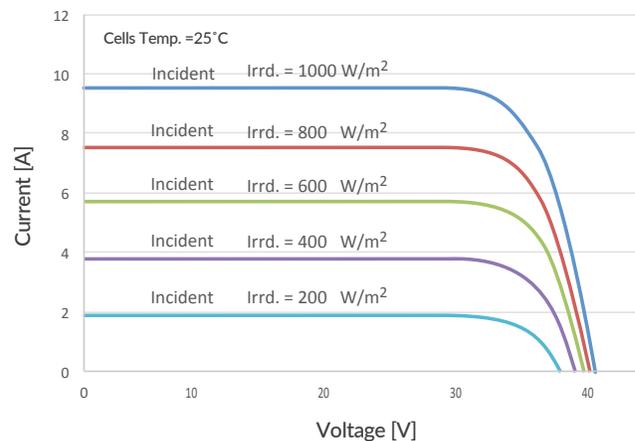
61215 / 61730 / 61701, Salt mist

UL

UL 1703 listed



## MSE310SQ8K: 310WP, 60CELL SOLAR MODULE CURRENT-VOLTAGE CURVE



Current-voltage characteristics with dependence on irradiance and module temperature

## BASIC DESIGN (UNITS: mm)

