RESIDENTIAL | COMMERCIAL



305-315W

18.95%

-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 poducts 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 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

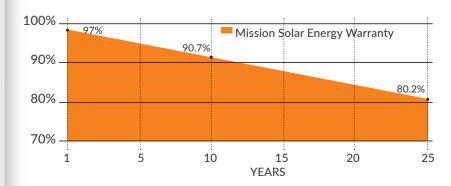
American Recovery & Reinvestment Act





LINEAR WARRANTY

PRODUCT WARRANTY



CERTIFICATIONS

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



*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



PERC 60

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	lsc	А	9.723	9.819	9.917
Open Circuit Voltage	Voc	V	39.96	40.09	40.13
Rated Current	Imp	А	9.238	9.362	9.465
Rated Voltage	Vmp	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 Pmax	-0.375%/°C
Temperature Coefficient of Voc	-0.280%/°C
Temperature Coefficient of Isc	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 ² / 12 AWG		
Connector	MC4		

SHIPPING INFORMATION

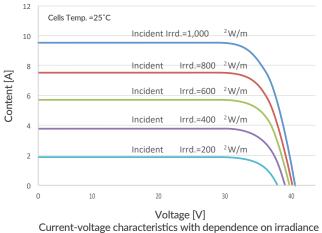
Container FT		Pallets	Panels	305 W	
53'	Double stack	36	936	285.48 kW	
40'	Double stack	28	728	222.04 kW	
	Panels	Weight	Height	Width	Length
Pallet	26	1,105lbs	45.50"	45.50"	67.00"

CLASS LEADING 305-315W

CERTIFICATIONS & TESTS

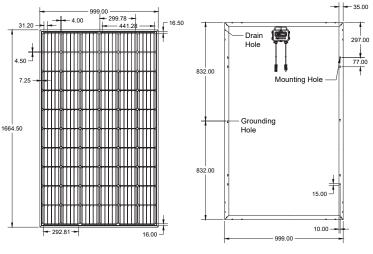
IEC			
61215 / 61730	/ 61701, Salt	mist	
UL			
UL 1703 listed			
		PowerGuard	CEC

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



Current-voltage characteristics with dependence on irradiance and module temperature

BASIC DESIGN (UNITS: mm)



Front View

Back View