

300-31

CLASS LEADING POWER OUTPUT

18.65%

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 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

All-black PERC with 5 busbar technology



CERTIFIED RELIABILITY

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



SUPERIOR AESTHETICS

- > All-black design coupled with outstanding power output
- > Ideal for residential & commercial applications



EXTREME WEATHER RESILIENCE

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



BAA COMPLIANT FOR GOVERNMENT PROJECTS

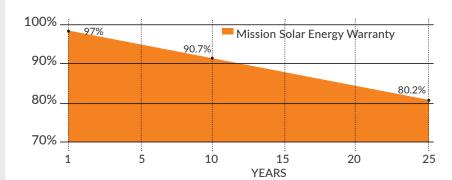
- › Buy American Act
- > American Recovery & Reinvestment Act





LINEAR WARRANTY

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			MSE300SQ8T	MSE305SQ8T	MSE310SQ8T
Power Output	Pmax	Wp	300	305	310
Module Efficiency		%	18.05	18.35	18.65
Tolerance			0~+3%	0~+3%	0~+3%
Short-Circuit Current	Isc	Α	9.571	9.664	9.760
Open Circuit Voltage	Voc	V	40.08	40.10	40.12
Rated Current	Imp	Α	9.058	9.202	9.345
Rated Voltage	Vmp	V	33.12	33.14	33.17
Fuse Rating			15	20	20

CERTIFICATIONS & TESTS

IEC
61215 / 61730 / 61701, Salt mist

UL
UL 1703 listed









CFC

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		

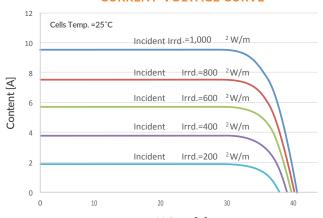
MECHANICAL DATA

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 ² / 12 AWG			
Connector	MC4 or compatible			

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

MSE310SQ8T: 310WP, 60CELL SOLAR MODULE CURRENT-VOLTAGE CURVE



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

BASIC DESIGN (UNITS: mm)

