# **AMERICA'S MODULE COMPANY**



## MSE PERC 60



## **CLASS LEADING POWER OUTPUT**

345 W

**POSITIVE POWER TOLERANCE** 

-0 to +3 %

## The True American Brand

Mission Solar Energy is headquartered in San Antonio, Texas, where we manufacture our modules. We produce American, high quality solar modules ensuring the highest in class power output and best in-class reliability. Our product line is tailored for residential, commercial and utility applications. Every Mission Solar Energy solar module is certified and surpasses industry standard regulations, proving excellent performance over the long-term. Demand the best, demand Mission Solar Energy.



## **CERTIFIED RELIABILITY**

- > Tested to UL 61730 & IEC standards
- > PID resistant
- > Resistance to salt mist corrosion



#### ADVANCED TECHNOLOGY

- > PERC and 6 busbar drive 18.7% module efficiency
- > Ideal for all applications



## **EXTREME WEATHER RESILIENCE**

- > 5600 Pa front and 4800 Pa back load
- > Tested load to UL 61730
- > 40mm frame



#### **BAA COMPLIANT FOR GOVERNMENT PROJECTS**

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





## FRAME-TO-FRAME WARRANTY

Degradation guaranteed not to exceed 2% in year one and 0.7% annually from years two to 30 with 81.2% guaranteed in year 25.

#### **CERTIFICATIONS**

UL 61730 IEC 61215 - IEC 61730 IEC 61701



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Please contact Mission Solar Energy if you have questions or concerns about certification of our products in your area.

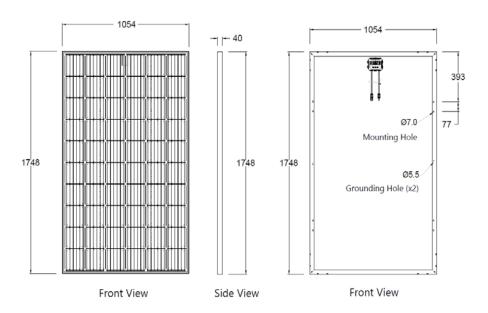
\*Standard 12-year product warranty extendable to 25 years with registration:

ELECTRICAL SPECIFICATION							
Product Type	MSExxxSX5T (xxx=P <sub>max</sub> )						
Power Output	$P_{\text{max}}$	$W_{p}$	<u>330</u>	<u>335</u>	<u>340</u>	<u>345</u>	
Module Efficiency		%	17.9	18.2	18.5	18.7	
Tolerance		%	0/+3	0/+3	0/+3	0/+3	
Short Circuit Current	Isc	V	10.72	10.78	10.86	10.92	
Open Circuit Voltage	$V_{oc}$	Α	40.40	40.58	40.82	41.00	
Rated Current	$I_{mp}$	V	10.05	10.14	10.24	10.34	
Rated Voltage	$V_{mp}$	V	32.85	33.03	33.20	33.37	
Fuse Rating		Α	20	20	20	20	
System Voltage		V	1000	1000	1000	1000	

TEMPERATURE COEFFICIENTS					
Normal Operating Cell Temperature (NOCT)	44.43°C (±3.7%)				
Temperature Coefficient of $P_{\text{max}}$	-0.361%/°C				
Temperature Coefficient of $V_{\text{oc}}$	-0.262%/°C				
Temperature Coefficient of I <sub>sc</sub>	0.039%/°C				

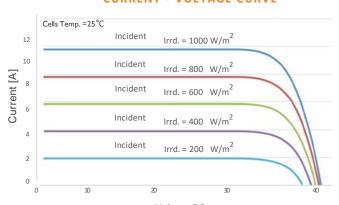
OPERATING CONDITIONS		
Maximum System Voltage	1,000Vdc	
Operating Temperature Range	-40°C (-40°F) to +85°C (185°F)	
Maximum Series Fuse Rating	20A	
Fire Safety Classification	Type 1	
Front & Back Load (UL Standard)	5600 Pa front and 4800 Pa back load Tested to UL 61730	
Hail Safety Impact Velocity	25mm at 23 m/s	

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



MECHANICAL DATA			
Solar Cells	P-type mono-crystalline silicon		
Cell Orientation	60 cells (6x10)		
Module Dimension	1748mm x 1054mm x 40mm		
Weight	20.3 kg (44.8 lbs.)		
Front Glass	3.2mm, tempered, low-iron,		
	anti-reflective		
Frame	Anodized		
Encapsulant	Ethylene vinyl acetate (EVA)		
Junction Box	Protection class IP67		
Junetion box	with 3 bypass-diodes		
Cable	1.0m, Wire 4mm <sup>2</sup> (12AWG)		
Connector	Staubli PV-KBT4/6II-UR and		
Connector	PV-KST4/6II-UR, MC4, Renhe 05-8		

## MSE345SX5T: 345WP, 60 CELL SOLAR MODULE CURRENT - VOLTAGE CURVE



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

#### **CERTIFICATIONS & TESTS**

IEC 61215, 61730, 61701 UL 61730



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SHIPPING INFORMATION							
Container FT	Ship To	Pallet	Panels	345 W Bin			
53'	Most states	34	884	304.98 kW			
Double Stack	California	28	728	251.16 kW			
Pallet [26 Panels]							
Weight	Height	Width		Length			
1263 lbs.	47.5 in	46 in		70.25 in			
(573 kg)	(120.65 cm)	(116.84 cm)		(178.43 cm)			