

MSE Mono 60

High Power Mono Rooftop Module



Class Leading Output:
280W power



Advanced P-Type
monocrystalline cell
technology



Certified Reliability:
3X IEC, salt mist, ammonia



Buy American Act



Proudly assembled in the USA

Mission Solar Energy is headquartered in San Antonio, TX with module facilities onsite. Our hardworking team calls Texas home and is devoted to producing high quality solar products and services. Our supply chain includes local and domestic vendors increasing our impact to the U.S. economy.



Assembled
in the USA

CERTIFICATIONS

IEC 61215/ IEC 61730/ IEC 61701
UL 1703: CSA



Independently Audited by



*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.

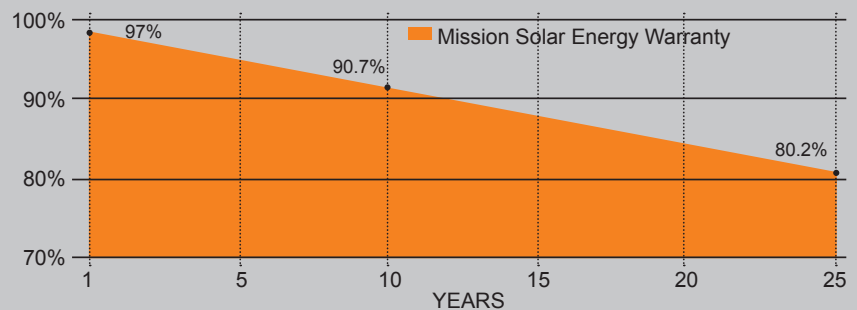
Proven reliability and bankability

Mission Solar Energy panels have been tested by independent testing centers to meet and exceed IEC standards. Our panels are deployed in projects across North America.

Best in class quality

Mission Solar Energy production lines are fully automated and include multiple quality checks throughout the production process.

25-YEAR LINEAR WARRANTY



ELECTRICAL SPECIFICATIONS

Electrical parameters at Standard Test Condition (STC)

Module Type			MSE270SO5K	MSE275SO5K	MSE280SO5K
Power Output	P _{max}	W _p	270	275	280
Module Efficiency		%	16.26	16.55	16.85
Tolerance			0~+3%		
Short-Circuit Current	I _{sc}	A	9.28	9.34	9.37
Open Circuit Voltage	V _{oc}	V	37.64	37.82	38.22
Rated Current	I _{mp}	A	8.78	8.89	8.93
Rated Voltage	V _{mp}	V	30.79	30.95	31.37

STC: Irradiance 1000 W/m², Cell temperature of 25°C, AM 1.5

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	44°C (±2°C)
Temperature Coefficient of P _{max}	-0.415%/°C
Temperature Coefficient of V _{oc}	-0.312%/°C
Temperature Coefficient of I _{sc}	0.042%/°C

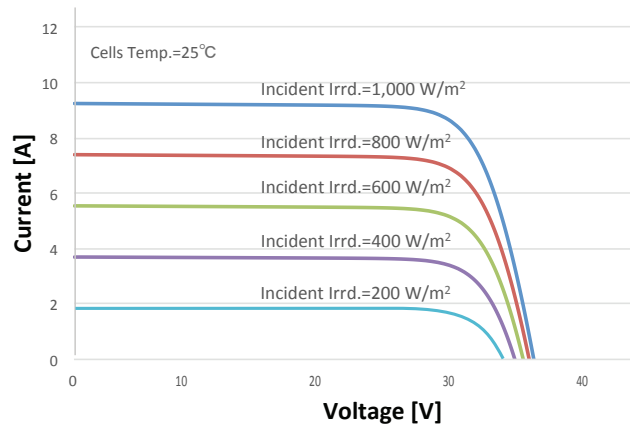
OPERATING CONDITIONS

Maximum System Voltage	1,000VDC
Operating Temperature Range	-40°C (-40°F) to +90°C (194°F)
Maximum Series Fuse Rating	15A
Fire Safety Classification	Type 1, Class C
Static Load Wind/Snow	2400Pa/5400Pa
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), 4 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

MSE275SO5K: 275WP, 60CELL SOLAR MODULE CURRENT-VOLTAGE CURVE



Current-voltage characteristics with dependence on irradiance and module temperature

BASIC DESIGN (UNITS: mm)

