

MSE PERC 60A

High Power Rooftop 60 Cell Module All-Black PERC with 5 Busbar Technology



MODULES
ASSEMBLED
DESIGNED &
ENGINEERED
IN THE USA
OF U.S. AND NON-U.S. PARTS

310W

CLASS LEADING POWER OUTPUT

19.1%

MODULE EFFICIENCY

-0 +5W

POSITIVE POWER TOLERANCE



CERTIFIED RELIABILITY

- > Tested to UL1703 standards
- > PID Resistant



SUPERIOR AESTHETICS

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



EXCELLENT WEATHER RESILIENCE

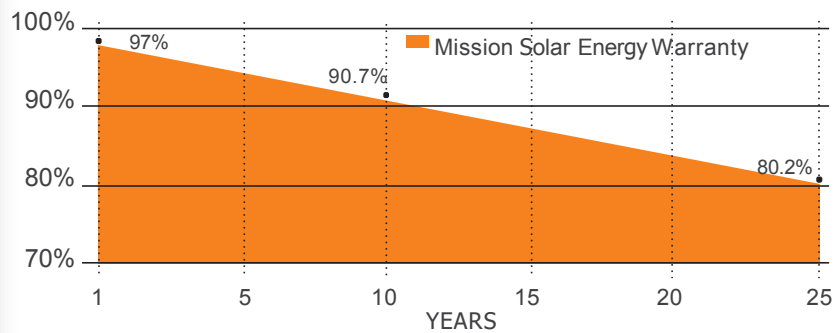
- > 3600 Pa snow load (75 psf) tested to UL1703

25-YEAR

PERFORMANCE WARRANTY

12-YEAR

PRODUCT WARRANTY



MISSION SOLAR ENERGY



MSE PERC 60A

ELECTRICAL SPECIFICATIONS

Electrical Parameters at Standard Test Conditions (STC)

Module Type		MSE60A310	
Power Output	P _{max}	W _p	310
Module Efficiency			%
Tolerance			-0 +5W
Short-Circuit Current	I _{sc}	A	10.21
Open-Circuit Voltage	V _{oc}	V	41.14
Rated Current	I _{mp}	A	9.40
Rated Voltage	V _{mp}	V	32.97

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	46.7°C(±2°C)
Temperature Coefficient of P _{max}	-0.38%/°C
Temperature Coefficient of V _{oc}	-0.28%/°C
Temperature Coefficient of I _{sc}	0.04%/°C

OPERATING CONDITIONS

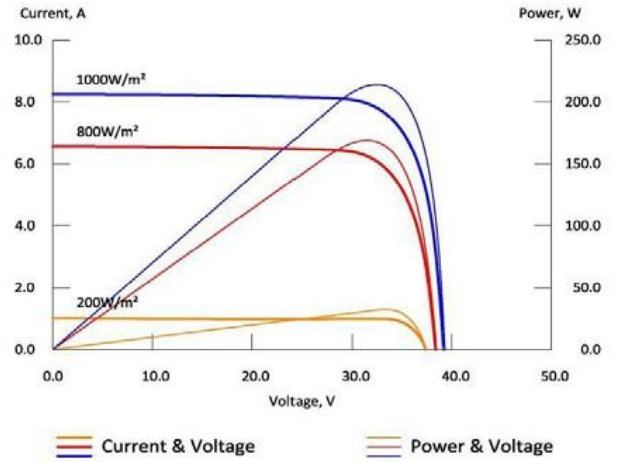
Maximum System Voltage	1,000VDC
Operating Temperature Range	-40°C to +85°C
Maximum Series Fuse Rating	20A
Fire Rating	TYPE 2
Front & Back Load	Design load 50psf (Max. load 75psf tested to UL1703)

MECHANICAL DATA

Solar Cells	P-type mono-crystalline silicon (156.75mm)
Cell Orientation	60 cells (6x10), 5-busbar
Module Dimensions	1640mm x 992mm x 40mm (64.57in. x 39.06in. x 1.57in.)
Weight	19.0kg (41.9lb)
Front Glass	3.2mm (0.126in.) 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 (39.37in.), 4mm ² / 12 AWG
Connector	MC4 compatible

SHIPPING INFORMATION

Container FT	Pallets	Panels	310W
53'	32	832	257.92kW
40'	28	728	225.68kW



Current-voltage characteristics with dependence on irradiance

BASIC DESIGN [UNITS: Inch (mm)]

