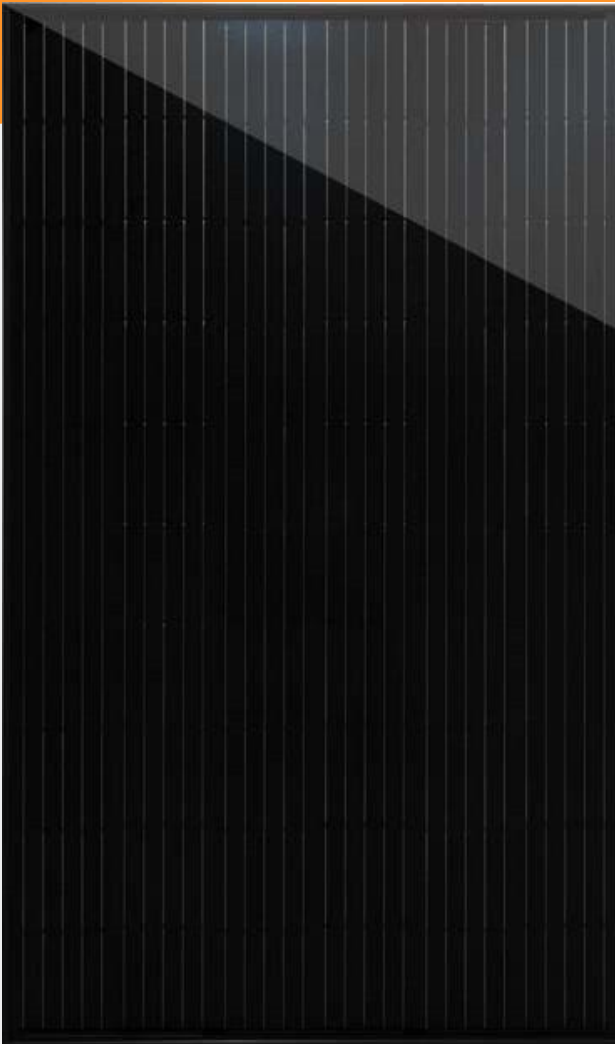


MSE PERC TS60

High-Power Rooftop 60 Cell Module

All-black PERC with 5 busbar technology



CERTIFIED RELIABILITY

› Tested to UL1703 standards



SUPERIOR AESTHETICS

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

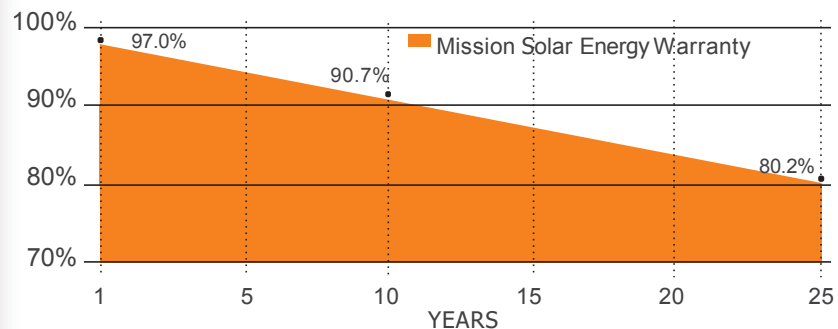


EXCELLENT WEATHER RESILIENCE

› Max. design loads for two rail system
› 113 psf, 5410 Pa, downward; 64 psf, 3064 Pa, upward
› Max. design loads for three rail system
› 178 psf, 8523 Pa, downward; 64 psf, 3064 Pa, upward



PRODUCT AND POWER WARRANTY



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

310W

CLASS LEADING POWER OUTPUT

18.5%

MODULE EFFICIENCY

High-Power, High Quality

Mission Solar Energy is headquartered in San Antonio, TX. We produce high-quality solar modules 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 solar module is certified and surpasses industry standard regulations, proving excellent performance over the long-term.

MSE PERC TS60

ELECTRICAL SPECIFICATIONS

Electrical Parameters at Standard Test Conditions (STC)

Module Type			MSE305TS60	MSE310TS60
Power Output	P _{max}	W _p	305	310
Module Efficiency	%		18.2	18.5
Tolerance			- / + 3%	- / + 3%
Short-Circuit Current	I _{sc}	A	9.691	9.749
Open-Circuit Voltage	V _{oc}	V	40.23	40.44
Rated Current	I _{mp}	A	9.195	9.270
Rated Voltage	V _{mp}	V	33.17	33.46

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

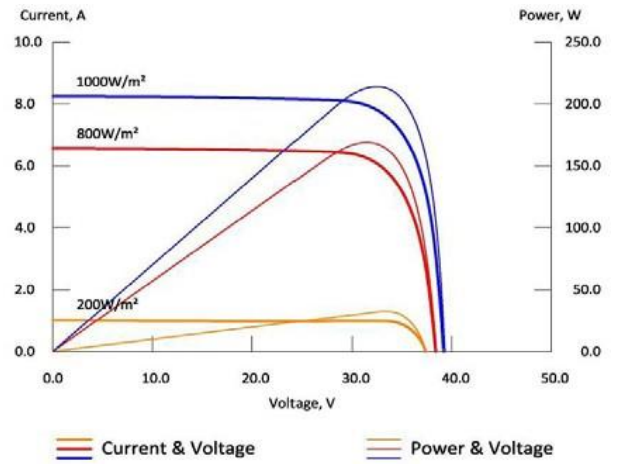
Maximum System Voltage	1,000VDC
Operating Temperature Range	-40°C to +85°C
Maximum Series Fuse Rating	20A
Fire Rating	TYPE 1
Front & Back Load	Max. design loads for 2 rail system 113 psf, downward, 64 psf, upward Max. design loads for 3 rail system 178 psf, downward, 64 psf, upward

MECHANICAL DATA

Solar Cells	P-type mono-crystalline silicon (156.75mm)
Cell Orientation	60 cells (6x10), 5-busbar
Module Dimensions	1675mm x 1001mm x 33mm (65.95in. x 39.40in. x 1.30in.)
Weight	18.0kg (39.7lb)
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 IP65 with 3 bypass-diodes
Cables	PV wire, 1m (39.37in.), 4mm ² / 12 AWG
Connector	MC4 connector

SHIPPING INFORMATION

Container/FT	Pallets	Panels	310W
53'	30	900	279.0kW



Current-voltage characteristics with dependence on irradiance

BASIC DESIGN [UNITS: Inch (mm)]

