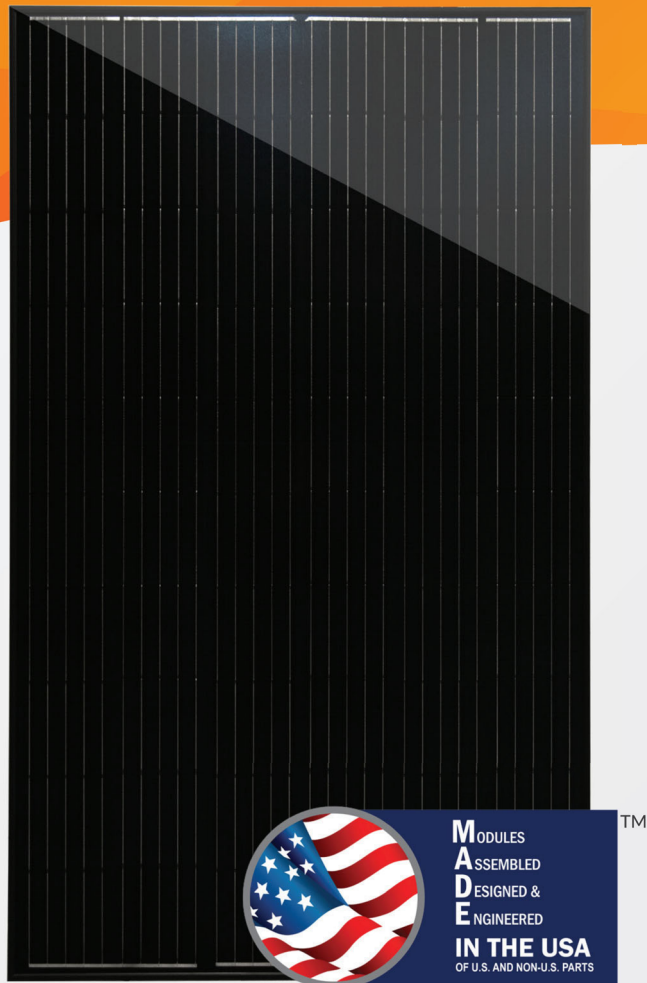


MSE PERC 60

High Power PERC Rooftop Module

All-black PERC with 5 busbar technology



300-310W

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 products 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.



CERTIFIED RELIABILITY

- › Tested to UL1703 & IEC standards
- › PID Resistant



SUPERIOR AESTHETICS

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



EXTREME WEATHER RESILIENCE

- › 5631 Pa snow load (117 psf) tested load to UL1703
- › 185 mph wind rating*



BAA COMPLIANT FOR GOVERNMENT PROJECTS

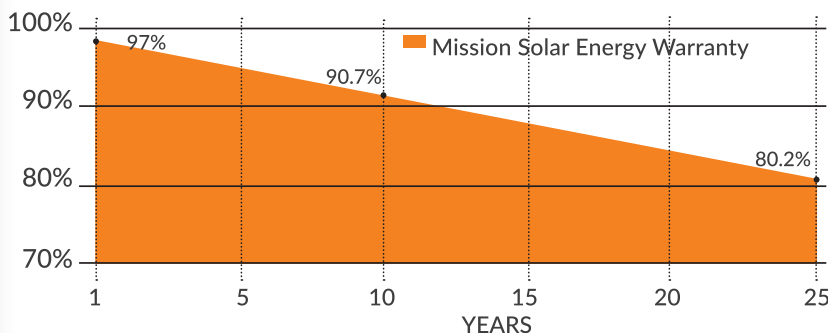
- › Buy American Act
- › American Recovery & Reinvestment Act



LINEAR WARRANTY



PRODUCT WARRANTY



CERTIFICATIONS

IEC 61215/ IEC 61730/ IEC 61701 UL 1703



CEC

*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.

*185 mph wind rating based upon installation at 30° or less fixed tilt mount



ELECTRICAL SPECIFICATIONS

Electrical Parameters at Standard Test Conditions (STC)

| Module Type | | | MSE300SQ8T | MSE305SQ8T | MSE310SQ8T |
|-----------------------|------------------|----------------|------------|------------|------------|
| Power Output | P _{max} | W _p | 300 | 305 | 310 |
| Module Efficiency | | % | 18.05 | 18.35 | 18.65 |
| Tolerance | | | 0~+3% | 0~+3% | 0~+3% |
| Short-Circuit Current | I _{sc} | A | 9.571 | 9.664 | 9.760 |
| Open Circuit Voltage | V _{oc} | V | 40.08 | 40.10 | 40.12 |
| Rated Current | I _{mp} | A | 9.058 | 9.202 | 9.345 |
| Rated Voltage | V _{mp} | V | 33.12 | 33.14 | 33.17 |
| Fuse Rating | | | 15 | 20 | 20 |

TEMPERATURE COEFFICIENTS

| | |
|---|----------------|
| Normal Operating Cell Temperature (NOCT) | 46.09°C (±2°C) |
| Temperature Coefficient of P _{max} | -0.377%/°C |
| Temperature Coefficient of V _{oc} | -0.280%/°C |
| Temperature Coefficient of I _{sc} | 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 | Class C |
| Front & Back Load (UL standard) | 5631 Pa (117 psf) Tested load to UL1703 standard |
| 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 |

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 | 1,105lbs | 45.50" | 45.50" | 67.00" |

CERTIFICATIONS & TESTS

IEC

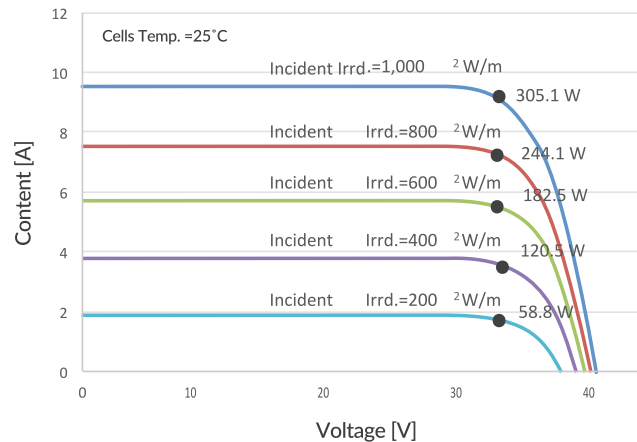
61215 / 61730 / 61701

UL

UL 1703 listed



MSE305SQ8T: 305WP, 60CELL SOLAR MODULE CURRENT-VOLTAGE CURVE



Current-voltage characteristics with dependence on irradiance and module temperature

BASIC DESIGN (UNITS: mm)

