



Solar Panel Shingled MSSH



Key Features

High Reliability

- Cell type Shingled mono-crystalline

High Efficiency

- Cell efficiency 22.8~24%

High Durability

- Power tolerance $\pm 3\%$
- 25-years performance guarantee 80%
- Power degradation first year 1%
- Power degradation subsequent year 0.75%

Product Specifications

Electrical parameters at standard test conditions

STC  1.000W/m²

 Cells Temperature 25°C

 AM=1.5

Specifications

Item	MSSH-80	MSSH-100	MSSH-140	MSSH-180	MSSH-180 slim
Max Power (Pmax)	80W	100W	140W	180W	180W
Max voltage (Vmp)	16.4V	18.7V	18.1V	17.6V	22.8V
Max current (Imp)	4.88A	5.36A	7.73A	10.26A	7.9A
Open circuit voltage (Voc)	19.7V	22.4V	21.8V	21.1V	27.3V
Short circuit current (Isc)	5.17A	5.68A	8.2A	10.88A	8.4A
Max system voltage	600V				
Maximum Series Fuse Rating	20A				

Electrical parameters at NMOT test conditions

NMOT  Irradiance 800W/m²

 Ambient Temperature 20°C

 AM=1.5

 Wind Speed 1 m/s

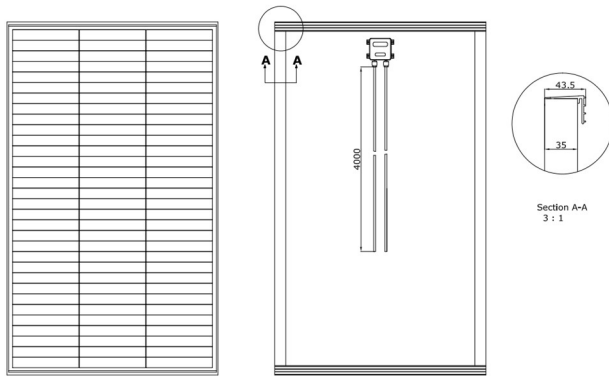
Specifications

Item	MSSH-80	MSSH-100	MSSH-140	MSSH-180	MSSH-180 slim
Max Power (Pmax)	64W	80W	112W	144W	144W
Max voltage (Vmp)	16.4V	18.7V	18.1V	17.6V	22.8V
Max current (Imp)	3.9A	4.3A	6.18A	8.2A	6.32A
Open circuit voltage (Voc)	19.7V	22.4V	21.8V	21.1V	27.3V
Short circuit current (Isc)	4.14A	4.54A	6.56A	8.7A	6.72A

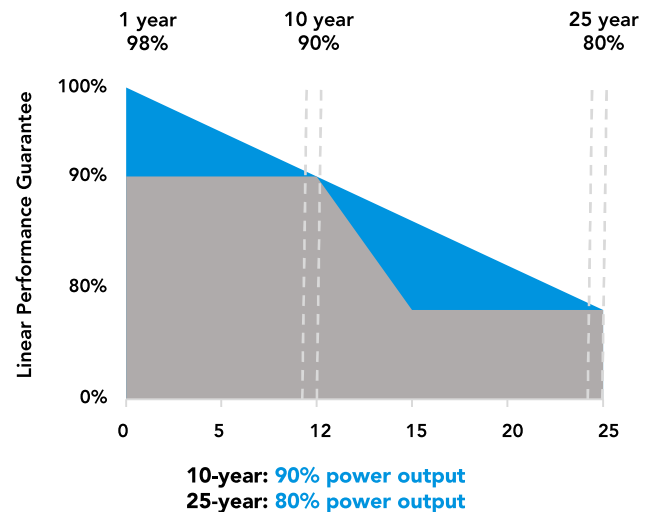
Mechanical Data

Item	MSSH-80	MSSH-100	MSSH-140	MSSH-180	MSSH-180 slim
L*W*H (mm)	1024*456*44	1159*456*44	1124*670*44	1094*880*44	1424*670*44
Number of cells	58 (29*2)	66 (33*2)	96 (32*3)	124 (31*4)	123 (41*3)
Cell Dimension (mm)	210x35	210x35	210x35	210x35	210x35
Output cables	2X2.5 mm2 PV cable, 5 meters		2X4 mm2 PV cable, 5 meters		
Connectors	N/A				
Glass	3.2mm, PV Glass				
Weight	5 kg	5.6 kg	8 kg	10.8 kg	10.2 kg
Color	Black				

Engineering Drawing



Performance Guarantee



Temperature Characteristics

Electrical parameters at standard test conditions

STC ☀️ 1.000W/m2 🌡️ Cells Temperature 25°C ☁️ AM=1.5

Specifications

Item	Specification
Temp.Coeff.of Isc (Isc)	+0.05%/°C
Temp.Coeff.of Voc (Voc)	- 0.29%/°C
Temp.Coeff.of Pmaxf (Pmax)	- 0.34%/°C
Operating temperature	- 40-+85°C
Normal operating cell temperature	44±2°C

Test, Certifications and Warranties

- ✓ System certifications ISO 9001
- ✓ Certifications CE
- ✓ Extreme wind and snow load testing: Withstand extreme wind load (2400 Pascal) and snow load (5400 Pascal)
- ✓ Junction box IP65
- ✓ Warranty 10 years products warranty and 25 years 80% of power



1) Measurement Tolerances: Pmax (± 3%), Isc & Voc (± 3%) - Module Type 0/+5W

2) STC (Standard Testing Condition): Irradiance 1000W/m². Cell Temperature 25°C. AM 1.5

3) NMOT (Nominal Operating Module Temperature): Irradiance 800W/m². NMOT. Ambient Temperature 20°C. AM 1.5. Wind Speed 1m/s

4) Item numbers 1519400/1519410/1519420/1519430/1519440/1519450/1519460/1519470

*The application of our layer adds 15/20 more watts compared to the standard cell.

Specifications included in this datasheet are subject to change without notice. Mestic reserves the right of final interpretation.