

MEMC



MEMC SILVANTIS 280W MODULE

MEMC is a recognized authority on silicon technology and manufacturing processes developed through more than 50 years of experience. With our vertically-integrated business model, MEMC delivers best-in-class solar modules by continuously leveraging new technology and manufacturing techniques that maximize efficiency, minimize cost, and extend product lifetime. Our solar module factory is ISO 14001 certified, and our products undergo rigorous inspection to ensure the highest possible quality.

MEMC Silvantis solar module family continues our tradition of excellence by delivering the highest levels of performance and with over 40 locations worldwide, MEMC is dedicated to providing local, responsive customer service.



HIGH EFFICIENCY

MEMC modules are designed to the highest industry standards of efficiency.



QUALITY

Manufactured in highly automated, state-of-the-art facilities certified to ISO9001 and ISO14001.



RELIABLE AND ROBUST DESIGN

High-quality materials, tempered front glass, and high-load capability are part of each module.

KEY FEATURES

- Tempered glass to ensure high conversion efficiency
- Positive power tolerance provide increased power output
- Withstands loads up to 5400 Pa as tested to IEC standards
- Non-corroding anodized aluminum frame for ruggedness
- Modules with a range of power output available
- Linear warranty

MODULE FAMILY

MEMC-P270ACA, MEMC-P275ACA, MEMC-P280ACA, MEMC-P285ACA, MEMC-P290ACA

QUALITY & SAFETY

- IEC61215 certified by T V S D to ensure long-term operation in a variety of climates
- IEC61730 certified by T V S D to ensure electrical safety
- Stringent outgoing quality acceptance criteria benchmarked to industry standards
- UL1703 listed by CSA for Canada and US

WARRANTY INFORMATION

- 10-year limited warranty for materials and workmanship
- 25-year linear power warranty with coverage for power loss greater than 2.5% in the first year and 0.7% degradation per year thereafter
- Backed by MEMC



280W SOLAR MODULE

MEMC



280W SOLAR MODULE DIMENSIONS mm[inch]

Module Dimensions

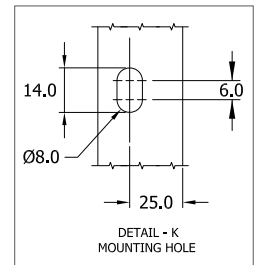
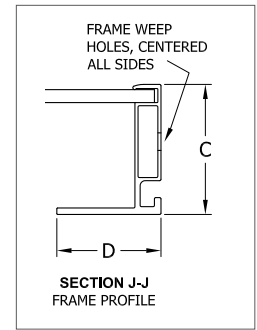
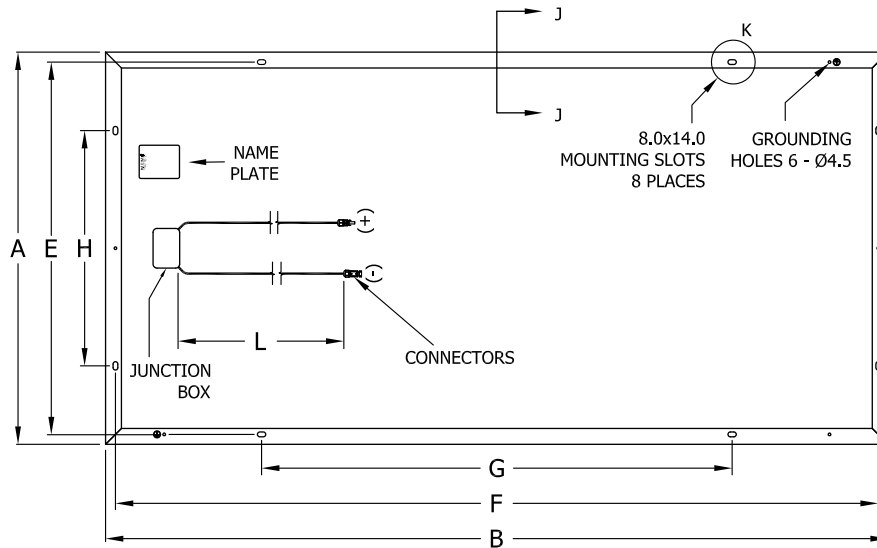
- A – 990 [39.0]
- B – 1,976 [77.8]
- C – 50 [2.0]
- D – 40 [1.6]

Mounting Hole Spacing

- E – 940 [37.0]
- F – 1,926 [75.8]
- G – 1,188 [46.8]
- H – 594 [23.4]

Cable Length

- L – 1,300 [39.4]



PHYSICAL PARAMETERS

Module Dimensions (mm)	1,976 x 990 x 50
Module Weight (kg)	23
Cell-Type	Multi-crystalline
Number of Cells	72
Frame Material	Anodized Aluminum
Glass (mm)	3.2 Tempered Glass

TEMPERATURE COEFFICIENTS AND PARAMETERS

Nominal Operating Cell Temperature (NOCT) (°C)	49.3 ± 2
Temperature Coefficient of P_{max} (%/°C)	-0.45
Temperature Coefficient of V_{oc} (%/°C)	-0.33
Temperature Coefficient of I_{sc} (%/°C)	0.06
Operating Temperature (°C)	-40 to +85
Maximum System Voltage (V)	600 (UL) & 1000 (IEC)
Limiting Reverse Current (A)	8.40
Maximum Series Fuse Rating (A)	15
Power Range (W)	-0/+5

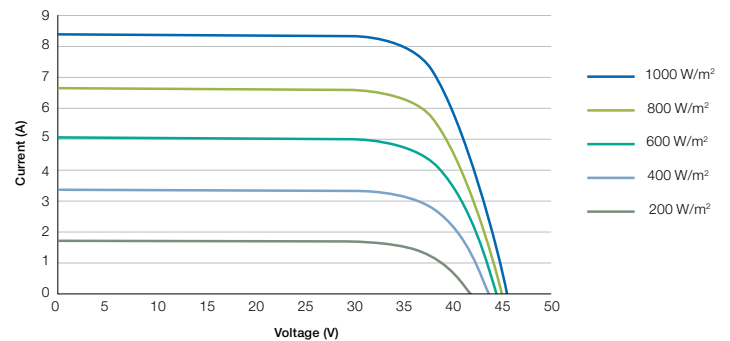
Temperature coefficients may vary by ±10%

ELECTRICAL CHARACTERISTICS

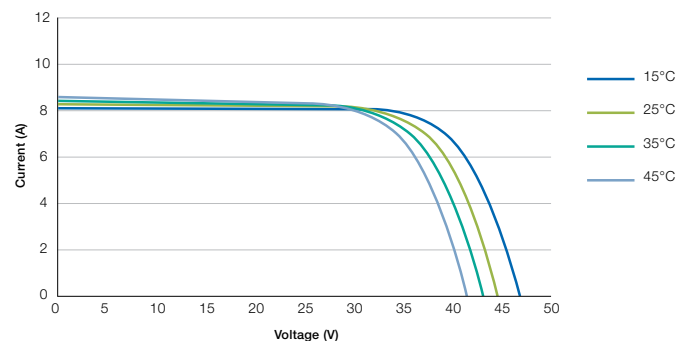
Model #	MEMC-P270ACA	MEMC-P275ACA	MEMC-P280ACA	MEMC-P285ACA	MEMC-P290ACA
Rated Maximum Power P_{max} (W)	270	275	280	285	290
Open-Circuit Voltage V_{oc} (V)	43.8	44.1	44.3	44.5	44.7
Short Circuit Current I_{sc} (A)	8.50	8.56	8.62	8.71	8.78
Module Efficiency (%)	13.9	14.2	14.3	14.6	14.8
Maximum Power Point Voltage V_{mpp} (V)	34.1	34.6	34.8	35.1	35.4
Maximum Power Point Current I_{mpp} (A)	8.00	8.05	8.12	8.18	8.20

All electrical data at standard test conditions (STC): 1000W/m², AM1.5, 25°C
Electrical characteristics measurement tolerance is ±5% and power is -0/+5W

IV CURVES AT MULTIPLE IRRADIANCES [25°C]



IV CURVES AT MULTIPLE TEMPERATURES [1000 W/m²]



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