

# MEMC



## MEMC SILVANTIS™ P290 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.

For more information on MEMC, please visit [www.memc.com](http://www.memc.com)



### 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, ARC glass, and high-load capability are part of each module.

### KEY FEATURES

- Textured glass with Anti-Reflective Coating (ARC) for higher energy production
- 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-P280AMC, MEMC-P285AMC,  
MEMC-P290AMC, MEMC-P295AMC, MEMC-P300AMC

### QUALITY & SAFETY

- IEC61215 certified by TÜV SÜD to ensure long-term operation in a variety of climates
- IEC61730 certified by TÜV SÜD to ensure electrical safety
- Stringent outgoing quality acceptance criteria benchmarked to industry standards
- UL1703 (1000V) listed by CSA for Canada and USA
- CE marked and CEC listed

### 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



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## P290 SOLAR MODULE DIMENSIONS mm[inch]

### Module Dimensions

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

### Cable Length

L – 1,000 [39.4]

### Mounting Hole Spacing

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

## 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 ARC glass

## TEMPERATURE COEFFICIENTS AND PARAMETERS

Nominal Operating Cell Temperature (NOCT) (°C)	47 ± 2
Temperature Coefficient of P <sub>max</sub> (%/°C)	-0.45
Temperature Coefficient of V <sub>oc</sub> (%/°C)	-0.33
Temperature Coefficient of I <sub>sc</sub> (%/°C)	+0.066
Operating Temperature (°C)	-40 to +85
Maximum System Voltage (V)	1000 (UL & IEC)
Limiting Reverse Current (A)	8.40
Maximum Series Fuse Rating (A)	15
Power Range (W)	-0/+5

Temperature coefficients may vary by ±10%

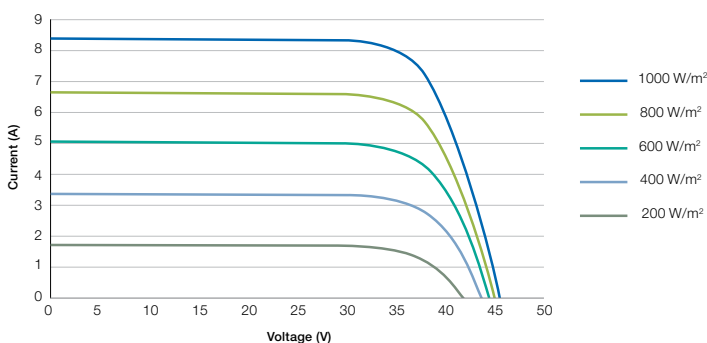
## ELECTRICAL CHARACTERISTICS

Model #	MEMC-P280AMC	MEMC-P285AMC	MEMC-P290AMC	MEMC-P295AMC	MEMC-P300AMC
Rated Maximum Power P <sub>max</sub> (W)	280	285	290	295	300
Open-Circuit Voltage V <sub>oc</sub> (V)	44.0	44.4	44.7	45.1	45.3
Short Circuit Current I <sub>sc</sub> (A)	8.60	8.65	8.71	8.95	9.00
Module Efficiency (%)	14.3	14.6	14.8	15.1	15.4
Maximum Power Point Voltage V <sub>mpp</sub> (V)	34.7	34.9	35.4	35.7	36.0
Maximum Power Point Current I <sub>mp</sub> (A)	8.08	8.16	8.20	8.26	8.34

All electrical data at standard test conditions (STC): 1000W/m<sup>2</sup>, AM1.5, 25°C  
 Electrical characteristics may vary by ±5% and power by -0/+5W

\* Listed specifications are subject to change without prior notice.

## IV CURVES AT MULTIPLE IRRADIANCES\* [25°C]



## IV CURVES AT MULTIPLE TEMPERATURES\* [1000 W/m²]

