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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Swisswatt AG  
MW 255-280-96C  
MW255**

Also available on the web at  
[EnergyPal.com/swisswatt-ag-solar-panels/mw255](http://EnergyPal.com/swisswatt-ag-solar-panels/mw255)



**MONOWATT**  
NATURAL ENERGY

**MODULE SERIES**  
**MW 255 - 280 - 96C**

MODULE TYPES

MW255, MW260, MW265, MW270, MW275, MW280



**SWISSWATT**

Schlätliweg 1

9052 Niederteufen, Switzerland

fon: +41 (0)71 511 56 10

fax: +41 (0)71 511 56 19

email: [info@swiss-watt.com](mailto:info@swiss-watt.com)

web: [www.swiss-watt.com](http://www.swiss-watt.com)

*The electrical parameters are typical values from historical production data. Measuring tolerance  $\pm 3\%$ .*

*Technical changes in the course of product development, mistakes and errors reserved. Data sheet MW190 - 210 72c V02-13*

## PRODUCT FEATURES

MONOWATT Modules with 96 cells offer 6 performance classes designed for roof - or ground mounting. The modules are best suitable for small, medium and large scale solar systems for on- or off-grid operations.

Technology, design and construction guarantee the highly efficient and reliable long term output of each and every module. Automatic production, clean room environment and a 6,5 mtr. flash tower ensure industry leading sustainable performance and its consequent documentation.

- + Industry leading power tolerance 0 - + 3 %
- + Unique frame design for insulation and weather exposure
- + Automatic clean-room production for sustainable returns
- + Frame mounting concept for long- and short side mounting
- + High transmission low iron tempered glass
- + Enhanced strength and impact resistance
- + Advanced EVA component encapsulation, multilayer backsheet technology

## WARRANTIES & ASSURANCES

Industry leading guaranty on material and manufacturing: 10 years

Output assurance: up to 12 years: 90 %, up to 25 years: 80%

Please refer to our warranty conditions

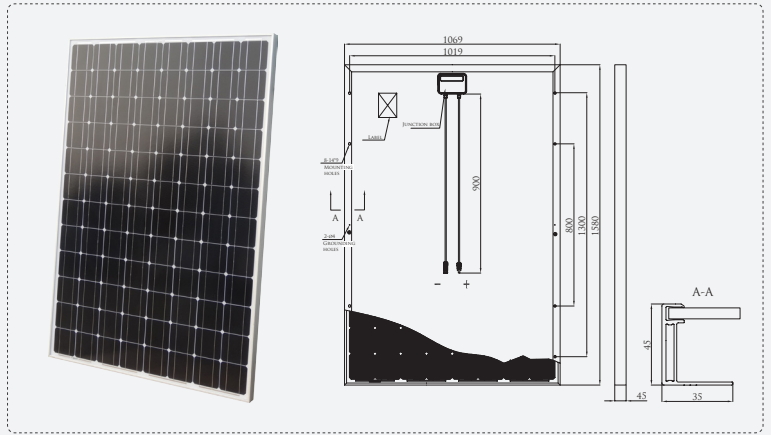
## QUALIFICATIONS & CERTIFICATES

Ongoing quality control and performance testing executed by independent testing laboratories grant the maximal benefit of your environmentally friendly energy production.

IEC 61215.2 / IEC 61730 / safety class II



## TECHNICAL DATA MODULE SERIES MW 255 - 280 - 96C



## MECHANICAL DATA & MEASURES

Cable type, Diameter, Length	4 mm <sup>2</sup> , TÜV certified, 900 mm
Connector type	Type III and Type IV compatible
Dimension (mm)	1580 x 1069 x 45
Weight	25
Drainage Holes in Frame	10
Glass, Type, Thickness	High Transmission, Low Iron, 3,2 mm Tempered Glass
Junction box	Ip 65
Bypass-Diodes	4

## ABSOLUTE RATINGS

Dielectric Insulation Voltage (V)	3000 V
Operating Temperature (°C)	-40 ~ +85
Storage Temperature (°C)	-40 ~ +85
Mechanical Load	5400 Pa up to <b>10000 Pa extrem</b>

## MODULE SERIES MW 255 - 280 - 96C

Max-System Voltage (VDC)	600V(UL) / 1000V(IEC)
Number, type and arrangement of cells	96, Mono-Crystalline Silicon (8 x 12)
Cell Size (mm)	125 x 125
Max. Series fuse (A)	15
Module variants	Indus, <b>extrem</b> , Shadow Black (255-270W)

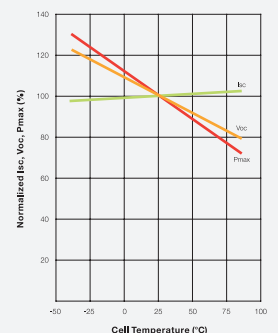
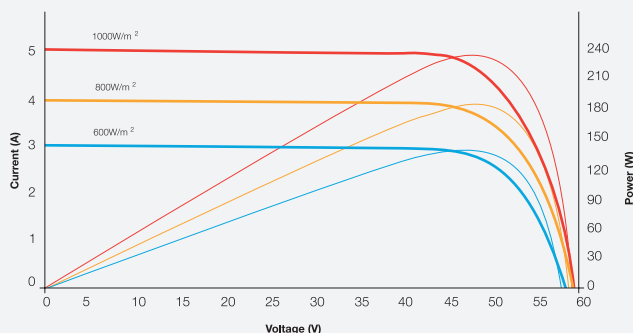
## ELECTRICAL DATA AT STC / NOCT (47 ± 2°C)

Module type	MW255	MW260	MW265	MW270	MW275	MW280
Rated output P <sub>MPP</sub> (W)	255 Wp	260 Wp	265 Wp	270 Wp	275 Wp	280 Wp
Max-Power Voltage V <sub>m</sub> (V)	48,62 / 45,76 V	49,11 / 45,94 V	49,4 / 46,12 V	49,6 / 46,30 V	50,3 / 44,34 V	50,6 / 44,52 V
Max-Power Current I <sub>MPP</sub> (A)	5,3 / 4,2 A	5,35 / 4,28 A	5,41 / 4,35 A	5,49 / 4,41 A	5,55 / 4,69 A	5,58 / 4,76 A
Open circuit Voltage V <sub>OC</sub> (V)	61,3 / 55,97 V	61,5 / 56,15 V	61,8 / 56,42 V	62,1 / 56,7 V	61,2 / 55,87 V	61,5 / 56,15 V
Short circuit voltage I <sub>SC</sub> (A)	5,4 / 4,59 A	5,49 / 4,67 A	5,53 / 4,7 A	5,59 / 4,75 A	5,88 / 5,0 A	5,94 / 5,05 A
Cell Efficiency (%)	17,80%	18,20%	18,60%	18,90%	19,20%	19,50%
Module efficiency %	15,10%	15,40%	15,70%	16,00%	16,30%	16,60%

## CURRENT-VOLTAGE CURVE (I-V-CURVE)

### I-V Curve

The current in relation to the voltage, illustrates the cell performance at different irradiances and temperatures. (AM1.5; 25°C)



### THERMAL CHARACTERISTICS

P <sub>m</sub> Temperature Coefficient (%/K)	-0,4454
I <sub>sc</sub> Temperature Coefficient (%/K)	0,0499
V <sub>oc</sub> Temperature Coefficient (%/K)	-0,3336