



MODULE SERIES PW 120 - 140 - 36C

MODULE TYPES

PW120, PW125, PW130, PW135, PW140



Schlättliweg 1
9052 Niederteufen, Switzerland

fon: +41 (0)71 511 56 10
fax: +41 (0)71 511 56 19
email: info@swiss-watt.com
web: 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 PW120 - 140 36c V02-13*

PRODUCT FEATURES

POLYWATT Modules with 36 cells offer 5 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. Our automatic production and our latest flash tower technology guarantee a documented performance above industry standard.

- + Industry leading power tolerance 0 - + 3 %
- + Unique frame design for insolation 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

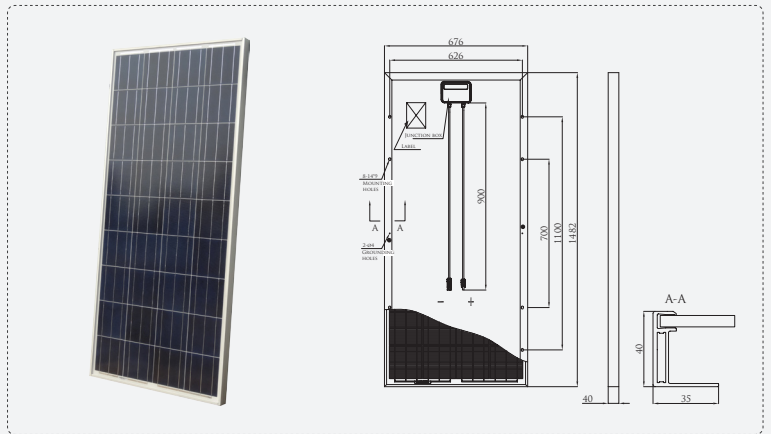
QUALIFICATIONS & CERTIFICATES

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 PW 120 - 140 - 36C



MECHANICAL DATA & MEASURES

| | |
|------------------------------|--|
| Cable type, Diameter, Length | 4mm ² , TÜV certified, 900 mm |
| Connector type | RADOX® SOLAR or Typ IV compatible |
| Dimension (mm) | 1482 x 676 x 40 |
| Weight | 12 |
| Drainage Holes in Frame | 8 |
| Glass, Type, Thickness | High Transmission, Low Iron, 3,2 mm Tempered Glass |
| Junction box | IP 65 Typ IV or IP67 RADOX® SOLAR |
| Bypass-Diodes | 3 |

ABSOLUTE RATINGS

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

MODULE SERIES PW 120 - 140 - 36C

| | |
|---------------------------------------|--------------------------------------|
| Max-System Voltage (VDC) | 600V(UL) / 1000V(IEC) |
| Number, type and arrangement of cells | 36, Poly-Crystalline Silicon (4 x 9) |
| Cell Size (mm) | 156 x 156 |
| Max. Series fuse (A) | 15 |
| Module variants | Indus, extrem , Shadow Black |

ELECTRICAL DATA AT STC

| Module type | PW120 | PW125 | PW130 | PW135 | PW140 |
|---|--------|---------|---------|---------|---------|
| Rated output P _{MPP} (W) | 120 Wp | 125 Wp | 130 Wp | 135 Wp | 140 Wp |
| Max-Power Voltage V _m (V) | 17,5 V | 17,85 V | 17,9 V | 18,0 V | 18,3 V |
| Max-Power Current I _{MPP} (A) | 6,86 A | 7,00 A | 7,3 A | 7,5 A | 7,65 A |
| Open circuit Voltage V _{OC} (V) | 21,4 V | 21,6 V | 21,74 V | 21,85 A | 21,95 V |
| Short circuit voltage I _{SC} (A) | 7,7 A | 8,0 A | 8,05 A | 8,18 A | 8,25 A |
| Cell Efficiency (%) | 13,70% | 14,30% | 14,80% | 15,40% | 16,00% |
| Module efficiency % | 12,00% | 12,50% | 13,00% | 13,50% | 14,00% |

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 _m Temperature Coefficient (%/K) | -0,48 |
| I _{sc} Temperature Coefficient (%/K) | 0,055 |
| V _{oc} Temperature Coefficient (%/K) | -0,347 |

