



## MODULE SERIES PW 120 - 140 - 36C

MODULE TYPES

PW120, PW125, PW130, PW135, PW140



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*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 backsheets 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

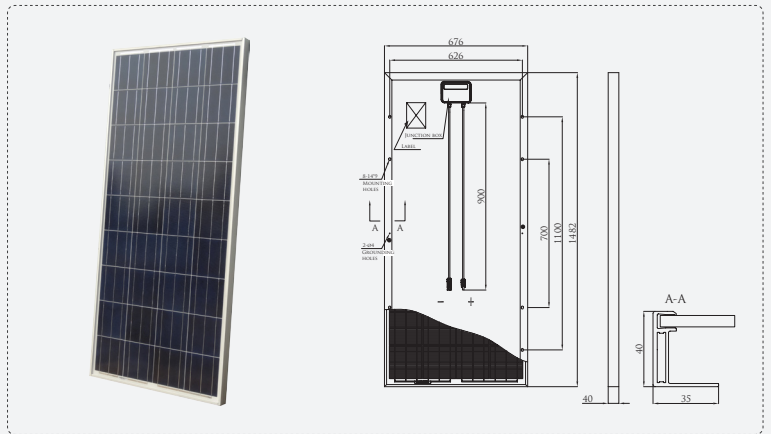
## QUALIFICATIONS & CERTIFICATES

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 <sup>2</sup> , 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 <b>10000 Pa extrem</b>

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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, <b>extrem</b> , Shadow Black

## ELECTRICAL DATA AT STC

Module type	PW120	PW125	PW130	PW135	PW140
Rated output P <sub>MPP</sub> (W)	120 Wp	125 Wp	130 Wp	135 Wp	140 Wp
Max-Power Voltage V <sub>m</sub> (V)	17,5 V	17,85 V	17,9 V	18,0 V	18,3 V
Max-Power Current I <sub>MPP</sub> (A)	6,86 A	7,00 A	7,3 A	7,5 A	7,65 A
Open circuit Voltage V <sub>OC</sub> (V)	21,4 V	21,6 V	21,74 V	21,85 A	21,95 V
Short circuit voltage I <sub>SC</sub> (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 <sub>m</sub> Temperature Coefficient (%/K)	-0,48
I <sub>sc</sub> Temperature Coefficient (%/K)	0,055
V <sub>oc</sub> Temperature Coefficient (%/K)	-0,347

