POLYWATT
NATURAL ENERGY

MODULE SERIES
PW 185 - 210 - 54C

MODULE TYPES

PW185, PW190, PW195, PW200, PW205, PW210

SWISSWATT
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 ± 3%.
Technical changes in the course of product development, mistakes and errors reserved. Data sheet PW185 - 210S 54c V02-13

PRODUCT FEATURES

POLYWATT Modules with 54 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 guarantie 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%

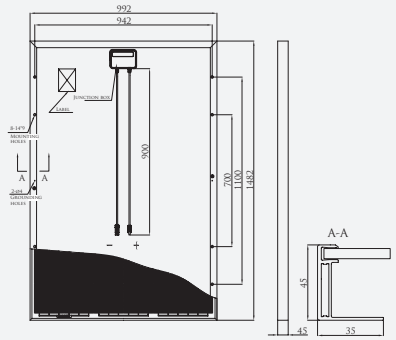
Please refer to our warranty conditions

QUALIFICATIONS & CERTIFICATES

Ongoing quality controll 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 185 - 210 - 54C



MECHANICAL DATA & MEASURES

Cable type, Diameter, Length	4mm2, TÜV certified, 900 mm
Connector type	RADOX® SOLAR or Typ IV compatible
Dimension (mm)	1482 x 992 x 45
Weight	17
Drainage Holes in Frame	10
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 185 - 210 - 54C

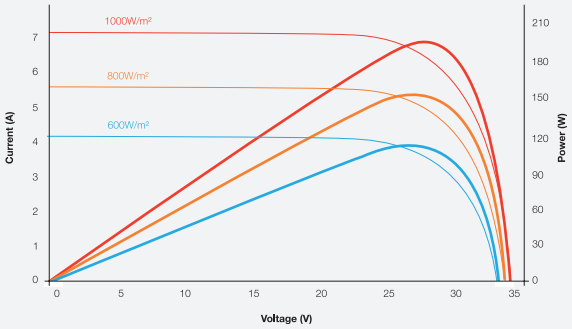
Max-System Voltage (VDC)	600V(UL) / 1000V(IEC)
Number, type and arrangement of cells	54, Poly-Crystalline Silicon (6 x 9)
Cell Size (mm)	156 x 156
Max. Series fuse (A)	15
Module variants	Indus, *extrem*, Shadow Black

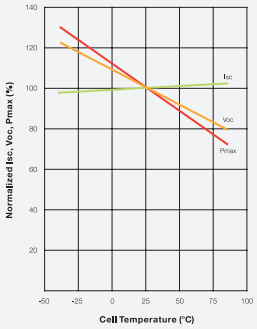
ELECTRICAL DATA AT STC

Module type	**PW185**	**PW190**	**PW195**	**PW200**	**PW205**	**PW210**
Rated output P_{MPP} (W)	185 Wp	190 Wp	195 Wp	200 Wp	205 Wp	210 Wp
Max-Power Voltage Vm (V)	26,06 V	26,5 V	26,57 V	26,7 V	26,83 V	27,06 V
Max-Power Current I_{MPP} (A)	7,1 A	7,17 A	7,34 A	7,49 A	7,63 A	7,76 A
Open circuit Voltage V_{OC} (V)	32,36 V	32,56 V	32,6 V	32,7 V	33,13 V	33,19 V
Short circuit voltage I_{SC} (A)	7,83 A	7,97 A	8,07 A	8,16 A	8,25 A	8,38 A
Cell Efficiency (%)	14,10%	14,50%	14,80%	15,20%	15,60%	16,00%
Module efficiency %	12,60%	12,90%	13,30%	13,60%	13,90%	14,30%

CURRENT-VOLTAGE CURVE (I-V-CURVE)

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





THERMAL CHARACTERISTICS

Pm Temperature Coeffizient (%/K)	-0,48
Isc Temperature Coefficient (%/K)	0,055
Voc Temperature Coefficient (%/K)	-0,347