PRODUCT

EUPD RESEARCH TOP BRAND PV MODULES GERMANY 2022

CE 🗆

SOLARWATT Panel vision AM 3.0 (375 Wp) pure

SOLARWATT

Glass-Glass-Module

Solid quality with high performance

Thanks to their design Solarwatt glass-glass modules deliver the highest long-term yields. They are robust and resilient. Bifacial PERC half-cut-cells enable modules that are optimized for maximum performance.

The solar cells are embedded almost indestructibly in the glass-glass composite and thus optimally protected against all weather effects and mechanical stress. Solarwatt can therefore offer a 30-year warranty on performance and product quality.

The Solarwatt FullCoverage insurance is included for 5 years and free of charge. It insures almost all risks and takes effect even if the modules do not produce electricity or deliver less than expected in the event of damage.

PRODUCT QUALITY

- ammonia resistant
- intensive hailstorm resistant
- salt mist resistant
- LeTID tested
- PID protected
- 100% plus-sorting
- snow-load warranty
- bifacial PERC half-cut-cells

SERVICE

FullCoverage insurance included (up to 1,000 kWp*)

simple returns policy as per "Delivery terms for Solarwatt solar modules"

30 year product warranty as per "Warranty conditions for Solarwatt solar modules"

30 year performance warranty

on 87 % of nominal power as per "Warranty conditions for Solarwatt solar modules"

* country-specific deviations apply



DIMENSIONS





ELECTRICAL DATA (STC)

STC (Standard Test Conditions): Irradiation intensity 1,000 W/m², spectral distribution AM 1.5 | Temperature 25 \pm 2 °C, in accordance to EN 60904-3

Nominal power P _{max}	375 Wp		
Nominal voltage V _{mp}	34.1 V		
Nominal current Imp	11.0 A		
Open circuit voltage Voc	41.9 V		
Short circuit current Isc	11.4 A		
Module efficiency	20.6 %		

Measurement tolerances: P_max ±5 %; Voc ±10 %; Isc ±10 %, I_{MP} ±10 %

Reverse-current power rating I_R : 20 A, operating modules with an external power source is only permissible if using a phase fuse with a tripping current of \leq 20 A.

ELECTRICAL DATA (NMOT AND WEAK LIGHT)

NMOT (Nominal Module Operating Temperature): Irradiation intensity 800 W/m², spectral distribution AM 1.5, Temperature 20 °C Weak light conditions: Irradiation intensity 200 W/m², Temperature 25 °C, Wind speed 1 m/s, load operation

Nominal power Pmax @NMOT	281 W
Nominal power P _{max @200 W/m²}	73.0 W

Measurement tolerances: Pmax ±5 %; Voc ±10 %; lsc ±10 %, lmp ±10 %

Reduction of module efficiency when irradiance is reduced from 1,000 W/m² to 200 W/m² (at 25 °C): 4 \pm 2 % (relative) / -0.6 \pm 0.3 % (absolute).

Module technology	Glass-glass laminate; aluminum frame
Covering material Encapsulation Backing material	Tempered solar glass with anti-reflective finish, 2 mm Solar cells in polymer encapsulation Tempered glass, partially printed in white (spaces between the cells), 2 mm
Solar cells	120 monocrystalline, bifacial, high power PERC-solar cells
Cell dimensions	166 x 83 mm
L x W x H / Weight	1,755±2 x 1,038±2 x 35±0.3 mm / 24.0 kg
Connection technology	Cables 2x 1.2 m / 4 mm² Stäubli MC4 connectors
Bypass diodes	3
Max. system voltage	1,500 V
IP rating	IP68
Protection class	II (acc. to IEC 61140)
Fire class	C (acc. to IEC 61730), BROOF (t1) (acc. to EN 13501-5)
Certified mechanical ratings as per IEC 61215	Pressure load up to 5,400 Pa (test load 8,100 Pa) Suction load up to 2,400 Pa (test load 3,600 Pa)
Recommended stress load as per Installa- tion Instructions	Please refer to the specifications in the Installation Instructions and Warranty Conditions.
Qualifications	IEC 61215 (incl. LeTID) IEC 61730 2 PfG 2387 (PID) IEC 61701 IEC 62716 MCS 005

THERMAL FEATURES

Operating temperature range	-40 +85 °C
Ambient temperature range	-40 +45 °C
Temperature coefficient P _{max}	-0.33 %/K
Temperature coefficient Voc	-0.26 %/K
Temperature coefficient Isc	0.05 %/K
NMOT	44 °C

BIFACIAL SPECIFICATIONS

Bifacial gain: Possible additional power by backside compared to front side power, depending on the mounting situation.

Bifacial gain	P _{max}	Isc
0 %	375 W	11.4 A
5 %	394 W	12.0 A
10 %	413 W	12.6 A
15 %	431 W	13.1 A
20 %	450 W	13.7 A

TRANSPORT AND PACKAGING

Modules per pallet	31	
Modules per container	806	
Pallets per truck	14 / 28	
Modules per truck	434 / 868	
Gross weight per pallet	784 kg	
Pallet dimensions (packing size)	1,800 x 1,140 x 1,180 mm	