

PRODUCT



SOLARWATT Panel vision H 3.0 style

Glass-Glass module

Solid quality with high performance

Thanks to their modern design Solarwatt glass-glass modules deliver the highest long-term yields. They are robust and more resilient than their predecessors. 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

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



SERVICE

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

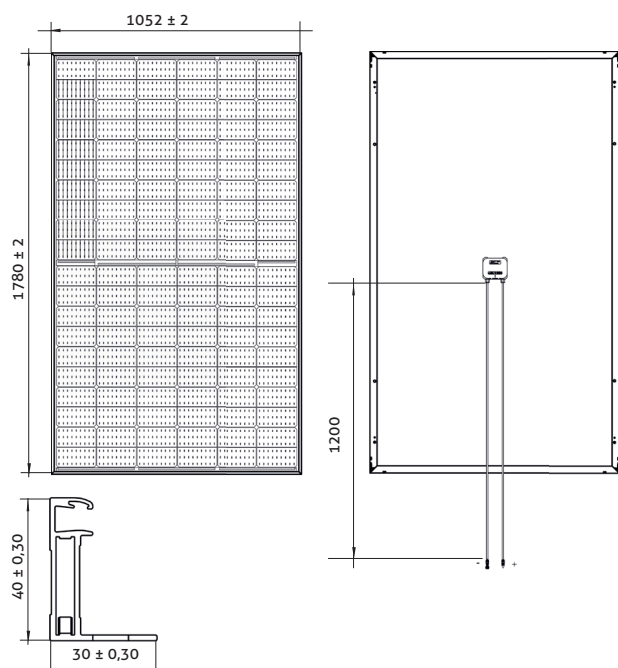
Simple returns policy
as per „Delivery terms for Solarwatt solar modules“

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 ± 2 °C, in accordance to EN 60904-3

Nominal power P _{max}	360 Wp	365 Wp	370 Wp
Nominal voltage V _{mp}	34.4 V	34.5 V	34.6 V
Nominal current I _{mp}	10.55 A	10.66 A	10.77 A
Open circuit voltage V _{oc}	41.1 V	41.2 V	41.3 V
Short circuit current I _{sc}	11.08 A	11.19 A	11.30 A
Module efficiency	19.4 %	19.6 %	19.9 %

Measurement tolerances: P_{max} ±5 %; V_{oc} ±10 %; I_{sc} ±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 ≤ 20 A.

BIFACIAL SPECIFICATIONS (BIFACIAL FACTOR: ≥ 70 %)

Bifi gain: : Additional power by backside compared to front side power at standard test conditions, depending on the mounting situation.

	P _{max}	I _{sc}	P _{max}	I _{sc}	P _{max}	I _{sc}
Bifi gain 0 %	360 W	11.08 A	365 W	11.19 A	370 W	11.30 A
Bifi gain 5 %	378 W	11.63 A	383 W	11.75 A	389 W	11.87 A
Bifi gain 10 %	396 W	12.19 A	402 W	12.31 A	407 W	12.43 A
Bifi gain 15 %	414 W	12.74 A	420 W	12.87 A	426 W	13.00 A
Bifi gain 20 %	432 W	13.30 A	438 W	13.43 A	444 W	13.56 A

THERMAL FEATURES

Operating temperature range	-40 ... +85 °C
Ambient temperature range	-40 ... +45 °C
Temperature coefficient P _{max}	-0,37 %/K
Temperature coefficient V _{oc}	-0,27 %/K
Temperature coefficient I _{sc}	0,04 %/K
NMOT	44 °C

GENERAL DATA

Module technology	Glass-glass laminate; aluminum frame, black
Covering material	Tempered solar glass with anti-reflective finish, 2mm
Encapsulation	Solar cells in polymer encapsulation, transparent
Backing material	Tempered glass, 2 mm
Transparent areas	appr. 7.4 %
Solar cells	120 monocrystalline, bifacial, high power PERC-solar cells
Cell dimensions	166 x 83 mm
L x W x H / Weight	1,780 ^{±2} x 1,052 ^{±2} x 40 ^{±0,3} mm / appr. 25 kg
Connection technology	Cables 2 x 1,2 m/ 4 mm ² Stäubli Electrical MC4 connectors
Bypass diodes	3
Max. system voltage	1,000 V
IP rating	IP67
Protection class	II (acc. to IEC 61140)
Fire class (in preparation)	A (acc. to IEC 61730/UL 790), E (acc. to EN 13501-1), B _{ROOF} (t1) (acc. to EN13501-5)
Certified mechanical ratings as per IEC 61215 (in preparation)	Suction load up to 2,400 Pa (test load 3,600 Pa) Pressure load up to 5,400 Pa (test load 8,100 Pa)
Recommended stress load as per Installation Instructions	Please refer to the specifications in the Installation Instructions and Warranty Conditions.
Qualifications	IEC 61215 IEC 61730 LeTID IEC 61701 IEC 62804 IEC 62716 MCS 005

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 P _{max} @NMOT	268 W	271 W	275 W
Nominal power P _{max} @200 W/m ²	70.5 W	71.4 W	72.4 W

Measurement tolerances: P_{max} ±5 %; V_{oc} ±10 %; I_{sc} ±10 %, I_{mp} ±10 %

Reduction of module efficiency when irradiance is reduced from 1,000 W/m² to 200 W/m² (at 25 °C): 4 ± 2 % (relative) / -0,6 ± 0,3 % (absolute).

TRANSPORT AND PACKAGING

Modules per palette	32
Palette dimensions (gross) L x W x H	1,800 x 1,070 x 1,550 mm
Gross weight per palette	847 kg
Palettes per truck	14
Modules per truck	448