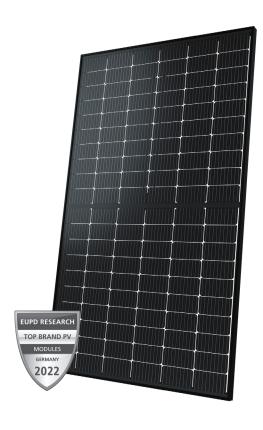
SOLARWATT

PRODUCT



SOLARWATT Panel vision H 3.0 style

Glass-Glass module

Solid auglity 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
- 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



Product Scorecard	
Material Health	Silver
Material Reutilization	Silver
Renewable Energy & Carbon Management	Gold
Water Stewardship	Silver
Social Fairness	Gold
Overall Certification Level	SILVER

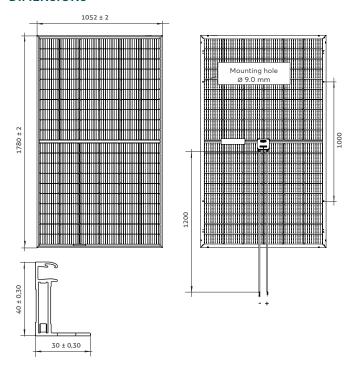
Subject to change | Errors excepted

This data sheet fulfills the requirements listed in IEC 61215-1-1 | EN Cradle to Cradle Certified® is a registered trademark of the Cradle to Cradle Products Innovation Institute.

Solarwatt GmbH | Maria-Reiche-Str. 2a | 01109 Dresden | Germany | T +49-351-8895-555 | F +49-351-8895-100 | solarwatt.com Certified acc. to DIN EN ISO 9001, 14001, 45001, 50001



DIMENSIONS



GENERAL DATA	
Module technology	Glass-glass laminate, aluminum frame, black
Covering material Encapsulation Backing material	Tempered solar glass with anti-reflective finish, 2 mm Solar cells in polymer encapsulation, transparent 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 mm² 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	A (acc. to IEC 61730/UL 790), E (acc. to EN 13501-1), Broof (t1) (acc. to EN13501-5)
Certified mechanical ra- tings as per IEC 61215	Suction load up to 3,600 Pa (test load 5,400 Pa) Pressure load up to 8,100 Pa (test load 12,150 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 (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}	360 Wp	365 Wp	370 Wp
Nominal voltage V _{mp}	34.4 V	34.5 V	34.6 V
Nominal current I _{mp}	10.6 A	10.7 A	10.8 A
Open circuit voltage Voc	41.1 V	41.2 V	41.3 V
Short circuit curren Isc	11.1 A	11.2 A	11.3 A
Module efficiency	19.4 %	19.6 %	19.9 %

Measurement tolerances: $P_{\text{max}} \pm 5$ %; $V_{\text{OC}} \pm 10$ %; $I_{\text{SC}} \pm 10$ %, $I_{\text{MP}} \pm 10$ %

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 P _{max @NMOT}	268 W	271 W	275 W
Nominal power P _{max @200 W/m²}	70.5 W	71.4 W	72.4 W

Measurement tolerances: $P_{max} \pm 5$ %; $V_{OC} \pm 10$ %; $I_{SC} \pm 10$ %, $I_{MP} \pm 10$ %

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).

BIFACIAL SPECIFICATIONS

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

	P _{max}	Isc	P _{max}	Isc	P _{max}	Isc
Bifi gain 0 %	360 W	11.1 A	365 W	11.2 A	370 W	11.3 A
Bifi gain 5 %	378 W	11.6 A	383 W	11.8 A	389 W	11.9 A
Bifi gain 10 %	396 W	12.2 A	402 W	12.3 A	407 W	12.4 A
Bifi gain 15 %	414 W	12.7 A	420 W	12.9 A	426 W	13.0 A
Bifi gain 20 %	432 W	13.3 A	438 W	13.4 A	444 W	13.6 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	

TRANSPORT AND PACKAGING

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