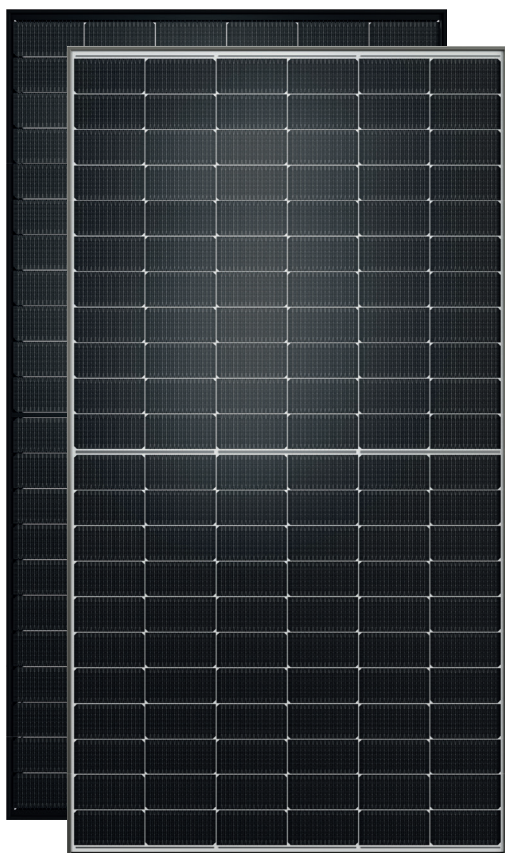


PRODUCT



SOLARWATT Panel

vision XL 5.0 pure

vision XL 5.0 style

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 TOPCon 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.

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.



SUSTAINABILITY



fair production conditions

no forced or child labour, fair pay and regular audits by independent audits by independent experts



high recycling rate in raw materials

aluminum: 75 %, cell silicium: 45 %
sustainable use through maximum durability and recycling at the end of the product life cycle

PRODUCT QUALITY

- performance: 605 Wp to 615 Wp
- bifacial TOPCon half-cut-cells
- LeTID tested and PID protected
- ammonia resistant
- salt mist resistant

SERVICE

simple returns policy

as per „Delivery terms for Solarwatt solar modules“

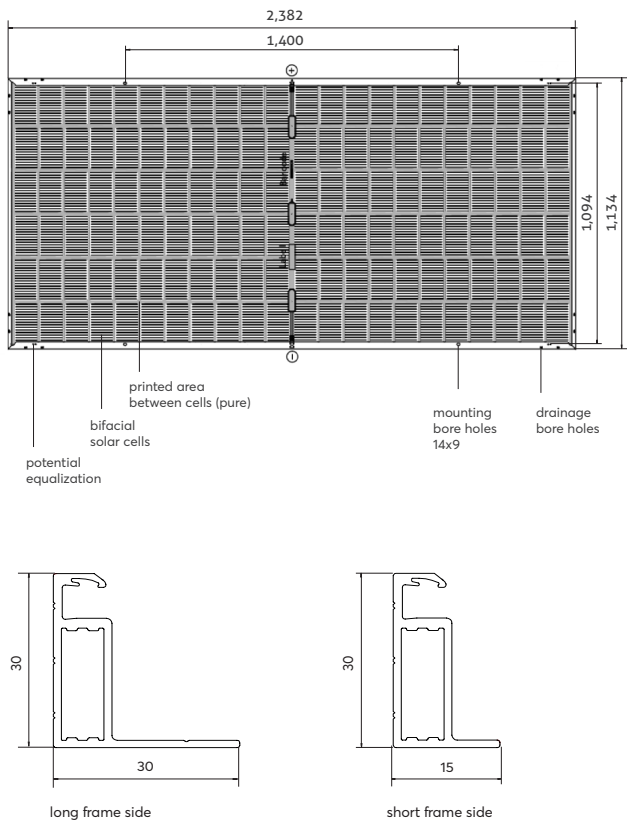
15 year product warranty

as per „Warranty conditions for SOLARWATT Panel vision XL“

30 year performance warranty

on 90 % of nominal power as per „Warranty conditions for SOLARWATT Panel vision XL“

DIMENSIONS



GENERAL DATA

Module technology	Glass-glass laminate; aluminum frame black (black) or silver (pure)
Covering material	Tempered solar glass with anti-reflective finish, 2 mm
Encapsulation	Solar cells in POE encapsulation
Backing material	Tempered glass, transparent (style) or printed (spaces between the cells) in white, 2 mm
Solar cells	132 monocrystalline, bifacial, high power TOPCon-solar cells
Cell dimensions	182 x 105 mm
L x W x H / Weight	2,382 ^{±2} x 1,134 ^{±2} x 30 ^{±0,3} mm / 33.4 kg
Connection technology	Cables 2x 1.3 m / 4 mm ² Sunter PV-ZH202B connectors
Bypass diodes	3
Max. system voltage	1,500 V
IP rating	IP68
Protection class	II (acc. to IEC 61140)
Fire class	in preparation: A (acc. to IEC 61730/UL 790)
Certified mechanical ratings as per IEC 61215	in preparation: Pressure load up to 3,600 Pa (test load 5,400 Pa) Suction load up to 2,400 Pa (test load 3,600 Pa)
Qualifications	in preparation: IEC 61215 (incl. LeTID) IEC 61730 PID IEC TS 62804 IEC 61701 IEC 62716

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

Please check the performance class availability!

Nominal power P _{max}	605 Wp	610 Wp	615 Wp
Nominal voltage V _{mp}	40.3 V	40.5 V	40.7 V
Nominal current I _{mp}	15.0 A	15.1 A	15.2 A
Open circuit voltage V _{oc}	48.5 V	48.7 V	48.9 V
Short circuit current I _{sc}	15.9 A	16.0 A	16.1 A
Module efficiency	22.4 %	22.6 %	22.8 %

Measurement tolerances: P_{max} ±5 %; V_{OC} ±3 %; I_{SC} ±3 %, I_{MP} ±10 %

Reverse-current power rating IR: 30 A, operating modules with an external power source is only permissible if using a phase fuse with a tripping current of ≤ 30 A.

THERMAL FEATURES

Operating temperature range	-40 ... +85 °C
Ambient temperature range	-40 ... +45 °C
Temperature coefficient P _{max}	-0,29 %/K
Temperature coefficient V _{oc}	-0,25 %/K
Temperature coefficient I _{sc}	0,05 %/K
NMOT	42 °C

ELECTRICAL DATA (WEAK LIGHT AND BNPI)

Weak light conditions: Irradiation intensity 200 W/m², Temperature 25 °C, Wind speed 1 m/s, load operation

BNPI: Bifacial Nameplate Irradiance G = 1000 W/m² + φ * 135 W/m²
φ = MIN (φ_{ISC}, φ_{Pmax}), φ_{ISC} = 80 %, φ_{VOC} = 100 %, φ_{Pmax} = 80 %

Nominal power P _{max@STC}	605 W	610 W	615 W
Nominal power P _{max @200 W/m²}	118.7 W	119.7 W	120.7 W
Nominal power P _{max@BNPI}	666 W	671 W	677 W
Open circuit voltage V _{OC@BNPI}	48.6 V	48.8 V	49.0 V
Short circuit current I _{SC@BNPI}	17.5 A	17.6 A	17.7 A

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 pallet	36
Pallets per container	20
Stacked pallets/pallets per truck	11/22
Gross weight per pallet	1,264 kg
Gross weight per stacked pallet (max. 2)	2,528 kg
Pallet dimensions (packing size)	2,396 x 1,140 x 1,250