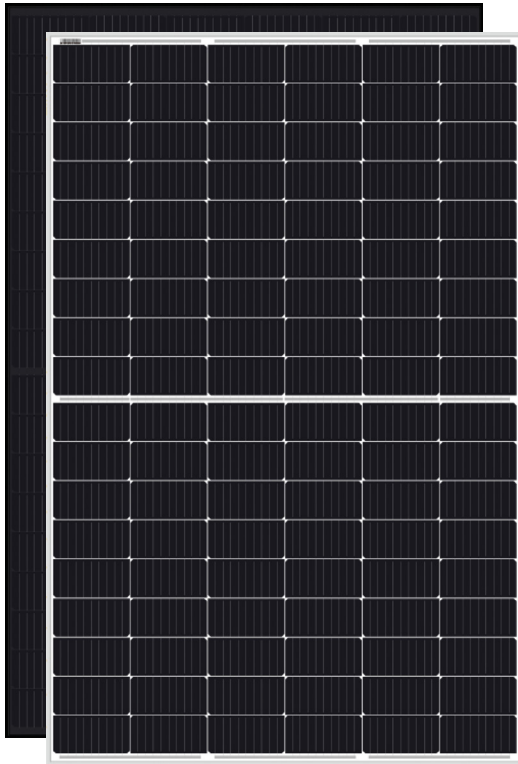


PRODUCT



SOLARWATT Panel

classic AM 2.5 pure

classic AM 2.5 black

Glass-Foil-Module

Best price-performance ratio

With the classic models, Solarwatt offers affordable, robust, high-performance solar modules of proven quality. They are durable and high-yielding as well as resistant to weather effects and environmental influences.

The classic-modules are produced on state-of-the-art production lines and meet the high Solarwatt quality standards. They will therefore generate solar power well beyond their warranty period.

The modules come with a solid 20-year product guarantee.



PRODUCT QUALITY

- ammonia resistant
- salt mist resistant
- LeTID tested
- PID protected
- 100 % plus-sorting

SERVICE

Full Coverage insurance

optional (up to 1,000 kWp) ¹

simple returns policy

as per Delivery terms for Solarwatt solar modules

20 year product warranty

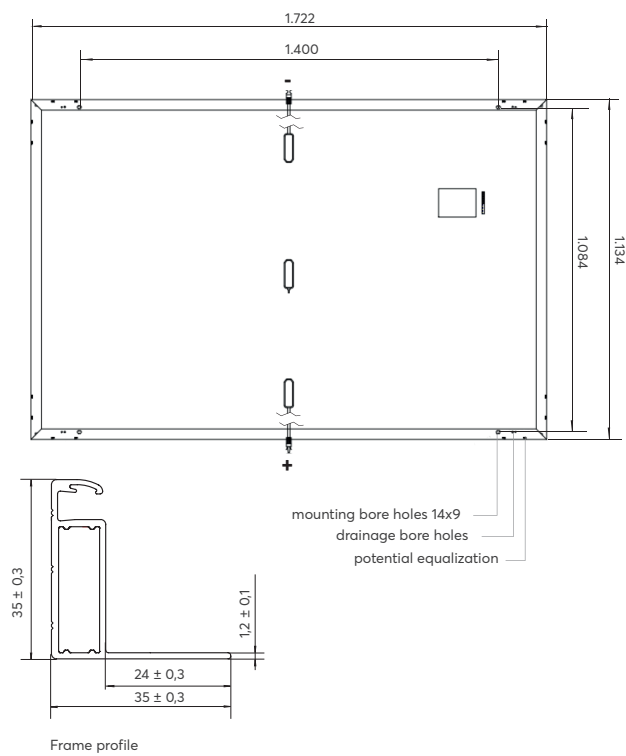
as per Warranty conditions for Solarwatt solar modules

25 year performance warranty

on 89.4 % of nominal power as per Warranty conditions for Solarwatt solar modules

¹ 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
Please check specific power class availability with your Solarwatt sales team

Nominal power P _{max}	420 W _p	425 W _p	430 W _p	435 W _p
Nominal voltage V _{mp}	32.0 V	32.2 V	32.4 V	32.6 V
Nominal current I _{mp}	13.1 A	13.2 A	13.3 A	13.4 A
Open circuit voltage V _{oc}	38.4 V	38.6 V	38.8 V	39.0 V
Short circuit current I _{sc}	13.8 A	13.8 A	13.9 A	13.9 A
Module efficiency	21.5 %	21.8 %	22.0 %	22.2 %

Measurement tolerances: P_{max} ±5 %; V_{oc} ±3 %; I_{sc} ±3 %, I_{mp} ±10 %
Reverse-current power rating I_R: 25 A, operating modules with an external power source is only permissible if using a phase fuse with a tripping current of ≤ 25 A.

THERMAL FEATURES

Operating temperature range	-40 ... +85 °C
Ambient temperature range	-40 ... +45 °C
Temperature coefficient P _{max}	-0,31 %/K
Temperature coefficient V _{oc}	-0,25 %/K
Temperature coefficient I _{sc}	0,06 %/K
NMOT	45 °C

GENERAL DATA

Module technology	Glass-foil laminate; aluminum frame black (black) or silver (pure)
Covering material	Tempered solar glass with anti-reflective finish, 3,2 mm
Encapsulation	Solar cells in POE encapsulation
Backing material	Multi-layer composite film Cell background: white (pure) or black (black) Module backside: white (pure and black)
Solar cells	108 monocrystalline high power TOPCon solar cells
Cell dimensions	182 x 91 mm
L x W x H / Weight	1,722 ^{±2} x 1,134 ^{±2} x 35 ^{±0,3} mm / appr. 21.4 kg
Connection technology	Cables 2x 1.2 m / 4 mm ² , Stäubli Electrical MC4 connectors
Bypass diodes	3
Max. system voltage	1,000 V
IP rating	IP68
Protection class	II (acc. to IEC 61140)
Fire class	C (acc. to IEC 61730)
Certified mechanical ratings as per IEC 61215	Pressure load up to 3,600 Pa (test load 5,400 Pa) Suction load up to 1,600 Pa (test load 2,400 Pa) Higher load approvals in preparation
Recommended stress load as per Installation Instructions	Please refer to the specifications in the Installation Instructions and Warranty Conditions.
Qualifications	IEC 61215 (incl. LeTID) IEC 61730 in preparation: PID IEC TS 62804 IEC 61701 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	316 W	320 W	323 W	326 W
Nominal power P _{max} @200 W/m ²	82.6 W	83.5 W	84.7 W	85.7 W

Measurement tolerances: P_{max} ±5 %; V_{oc} ±3 %; I_{sc} ±3 %, I_{mp} ±10 %
Reduction of module efficiency when irradiation 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	31
Modules per container	806
Pallets per truck	14 / 28
Modules per truck	434 / 868
Gross weight per pallet	691 kg
Gross weight per stacked pallet (max. 2)	1,382 kg
Pallet dimensions (packing size)	1,770 x 1,140 x 1,250 mm