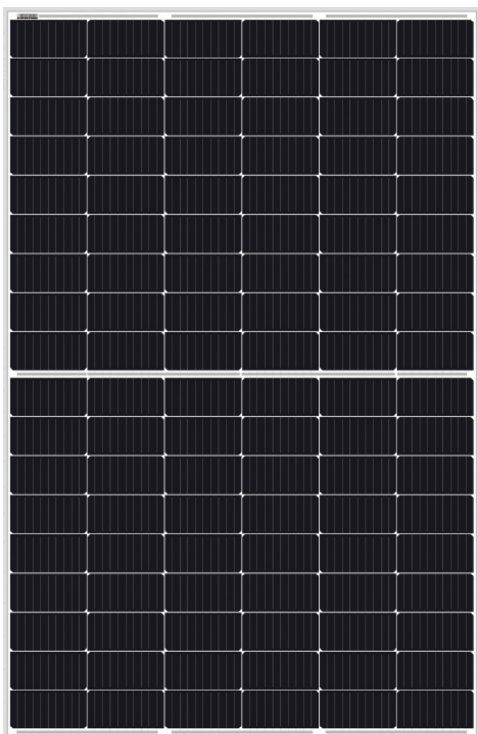


PRODUCT



SOLARWATT Panel classic AM 2.0 pure

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 15-year product guarantee.



PRODUCT QUALITY

- ammonia resistant
- salt mist resistant
- LeTID tested
- PID protected
- 100% plus-sorting
- max. 5,400 / 2,400 Pa

SERVICE

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

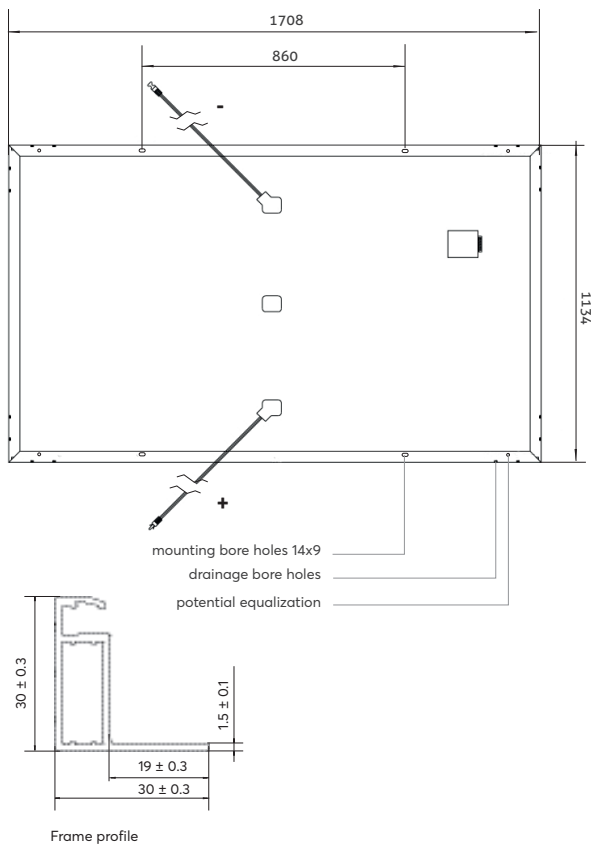
simple returns policy
as per „Delivery terms for Solarwatt solar modules“

15 year product warranty
12 years product warranty outside Europe and Australia
as per „Warranty conditions for Solarwatt solar modules“

25 year performance warranty
on 84.8 % of nominal power as per „Warranty conditions for Solarwatt solar modules“

* country-specific deviations apply

DIMENSIONS



GENERAL DATA

Module technology	Glass-foil laminate; aluminum frame
Covering material	Tempered solar glass with anti-reflective finish
Encapsulation	Solar cells in polymer encapsulation
Backing material	Multi-layer composite film, white
Solar cells	108 monocrystalline high power PERC solar cells
Cell dimensions	182 x 91 mm
L x W x H / Weight	1,708 x 1,134 ^{±2} x 30 ^{±0.3} mm / ca. 20.0 kg
Connection technology	Cables 2x 1.2 m / 4 mm ² , Stäubli Electrical MC4 or MC4-type 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)
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 2 PFG 2387 (PID) IEC 61701 IEC 62716 MCS 005

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}	400 W _p	405 W _p	410 W _p
Nominal voltage V_{mp}	30.4 V	30.4 V	30.4 V
Nominal current I_{mp}	13.2 A	13.3 A	13.4 A
Open circuit voltage V_{oc}	37.2 V	37.3 V	37.5 V
Short circuit current I_{sc}	13.6 A	13.7 A	13.8 A
Module efficiency	20.8 %	21.0 %	21.3 %

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

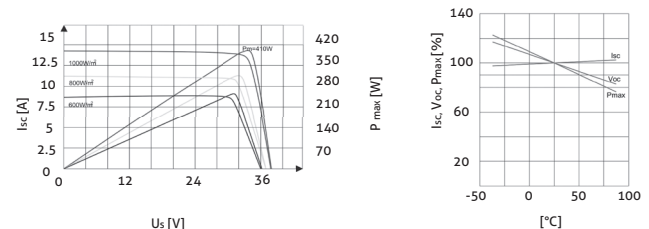
Reverse-current power rating I_r: 20 A, operating modules with an external power source is only permissible if using a phase fuse with a tripping current of ≤ 20 A.

THERMAL FEATURES

Operating temperature range	-40 ... +85 °C
Ambient temperature range	-40 ... +45 °C
Temperature coefficient P_{max}	-0.33 %/K
Temperature coefficient V_{oc}	-0.25 %/K
Temperature coefficient I_{sc}	0.05 %/K
NMOT	44 °C

CHARACTERISTIC LINES (Performance Class 410 W_p)

Voltage characteristic line at different temperatures and irradiances



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	300 W	304 W	307 W
Nominal power P_{max} @200 W/m²	78.0 W	79.0 W	80.0 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 pallet	36
Modules per container	936
Pallets per truck	15 / 30
Modules per truck	540 / 1,080
Gross weight per pallet	760 / 1,520 kg
Pallet dimensions (packing size)	1,750 x 1,140 x 1,250 mm