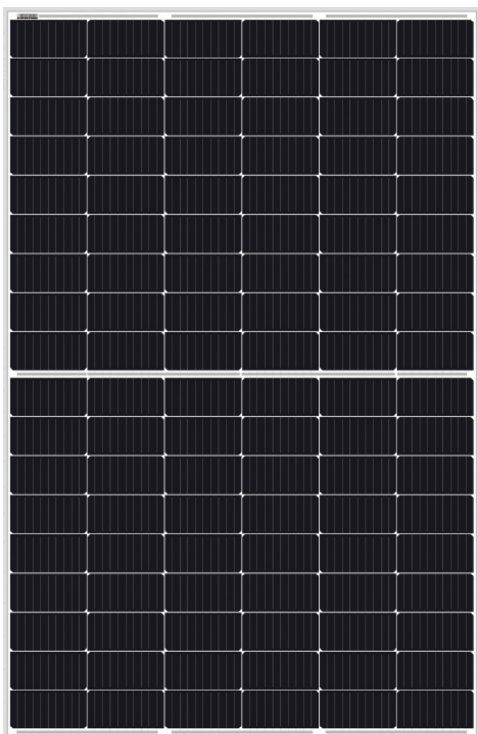


## PRODUCT



# SOLARWATT Panel classic H 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\*)

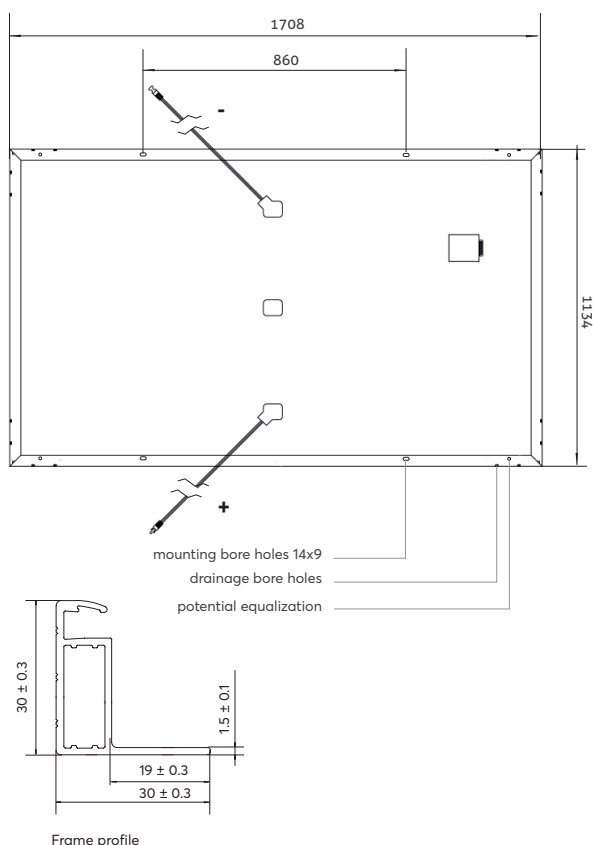
**simple returns policy**  
as per „Delivery terms for Solarwatt solar modules“

**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

<b>Module technology</b>	Glass-foil laminate; aluminum frame
<b>Covering material</b>	Tempered solar glass with anti-reflective finish
<b>Encapsulation</b>	Solar cells in polymer encapsulation
<b>Backing material</b>	Multi-layer composite film, white
<b>Solar cells</b>	108 monocrystalline high power PERC solar cells
<b>Cell dimensions</b>	182 x 91 mm
<b>L x W x H / Weight</b>	1,708 x 1,134 <sup>±2</sup> x 30 <sup>±0.3</sup> mm / ca. 20.0 kg
<b>Connection technology</b>	Cables 2x 1.2 m / 4 mm <sup>2</sup> , Stäubli Electrical MC4 or MC4-type connectors
<b>Bypass diodes</b>	3
<b>Max. system voltage</b>	1,000 V
<b>IP rating</b>	IP68
<b>Protection class</b>	II (acc. to IEC 61140)
<b>Fire class</b>	C (acc. to IEC 61730)
<b>Certified mechanical ratings as per IEC 61215</b>	Pressure load up to 3,600 Pa (test load 5,400 Pa) Suction load up to 1,600 Pa (test load 2,400 Pa)
<b>Recommended stress load as per Installation Instructions</b>	Please refer to the specifications in the Installation Instructions and Warranty Conditions.
<b>Qualifications</b>	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/m<sup>2</sup>, spectral distribution AM 1.5 | Temperature 25 ± 2 °C, in accordance to EN 60904-3

<b>Nominal power P<sub>max</sub></b>	400 W <sub>p</sub>	405 W <sub>p</sub>	410 W <sub>p</sub>
<b>Nominal voltage V<sub>mp</sub></b>	30.4 V	30.4 V	30.4 V
<b>Nominal current I<sub>mp</sub></b>	13.2 A	13.3 A	13.4 A
<b>Open circuit voltage V<sub>oc</sub></b>	37.2 V	37.3 V	37.5 V
<b>Short circuit current I<sub>sc</sub></b>	13.6 A	13.7 A	13.8 A
<b>Module efficiency</b>	20.8 %	21.0 %	21.3 %

Measurement tolerances: P<sub>max</sub> ± 5 %; V<sub>oc</sub> ± 10 %; I<sub>sc</sub> ± 10 %, I<sub>mp</sub> ± 10 %

Reverse-current power rating I<sub>r</sub>: 20 A, operating modules with an external power source is only permissible if using a phase fuse with a tripping current of ≤ 20 A.

## ELECTRICAL DATA (NMOT AND WEAK LIGHT)

**NMOT (Nominal Module Operating Temperature):** Irradiation intensity 800 W/m<sup>2</sup>, spectral distribution AM 1.5, Temperature 20 °C  
**Weak light conditions:** Irradiation intensity 200 W/m<sup>2</sup>, Temperature 25 °C, Wind speed 1 m/s, load operation

<b>Nominal power P<sub>max</sub> @NMOT</b>	300 W	304 W	307 W
<b>Nominal power P<sub>max</sub> @200 W/m<sup>2</sup></b>	78.0 W	79.0 W	80.0 W

Measurement tolerances: P<sub>max</sub> ± 5 %; V<sub>oc</sub> ± 10 %; I<sub>sc</sub> ± 10 %, I<sub>mp</sub> ± 10 %

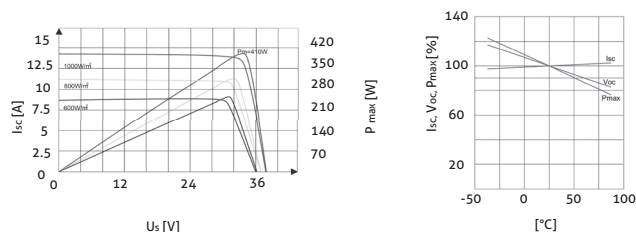
Reduction of module efficiency when irradiance is reduced from 1,000 W/m<sup>2</sup> to 200 W/m<sup>2</sup> (at 25 °C): 4 ± 2 % (relative) / -0.6 ± 0.3 % (absolute).

## THERMAL FEATURES

<b>Operating temperature range</b>	-40 ... +85 °C
<b>Ambient temperature range</b>	-40 ... +45 °C
<b>Temperature coefficient P<sub>max</sub></b>	-0.33 %/K
<b>Temperature coefficient V<sub>oc</sub></b>	-0.25 %/K
<b>Temperature coefficient I<sub>sc</sub></b>	0.05 %/K
<b>NMOT</b>	44 °C

## CHARACTERISTIC LINES (Performance Class 410 W<sub>p</sub>)

Voltage characteristic line at different temperatures and irradiances



## TRANSPORT AND PACKAGING

<b>Modules per pallet</b>	36
<b>Modules per container</b>	936
<b>Pallets per truck</b>	15 / 30
<b>Modules per truck</b>	540 / 1,080
<b>Gross weight per pallet</b>	760 / 1,520 kg
<b>Pallet dimensions (packing size)</b>	1,750 x 1,140 x 1,250 mm