SOLARWATT®
power to the people

Technical data sheet

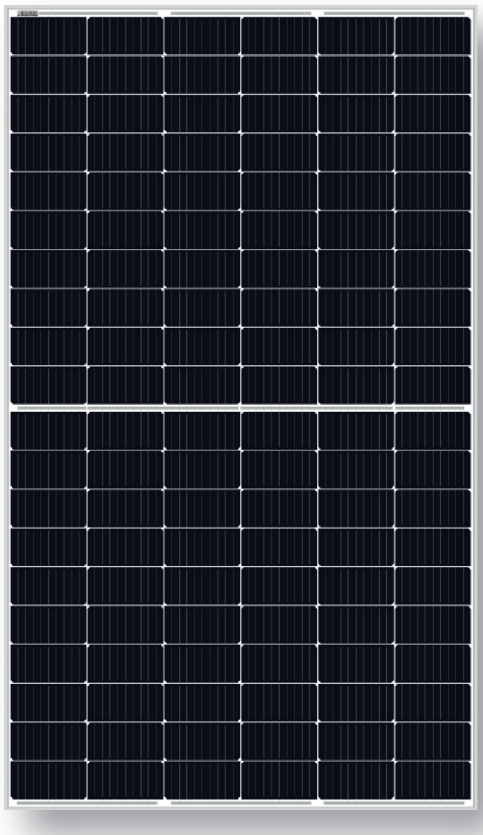
Eco 120M (370-375 Wp)

Glass-foil module
Best price-performance ratio

With the Eco 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 Eco-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 ten-year product guarantee, with FullCoverage insurance even twelve years. FullCoverage insures almost all risks and takes effect if the modules do not produce electricity or deliver less than expected in the event of damage.



Product Quality

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

Service

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

Simple returns policy
as per „Delivery terms for SOLARWATT solar modules"

12 Year Product Warranty
as per „Warranty conditions for SOLARWATT solar modules"

25 Year Performance Warranty
on 80 % of nominal power as per „Warranty conditions for SOLARWATT solar modules"

* country-specific deviations apply

Subject to change | Errors excepted
AZ-TDB-PMS-1911 | This data sheet fulfills the requirements listed in IEC 61215-1-1 | REV 000 | 07/2020 | EN

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Certified acc. to DIN EN ISO 9001, 14001, 45001, 50001

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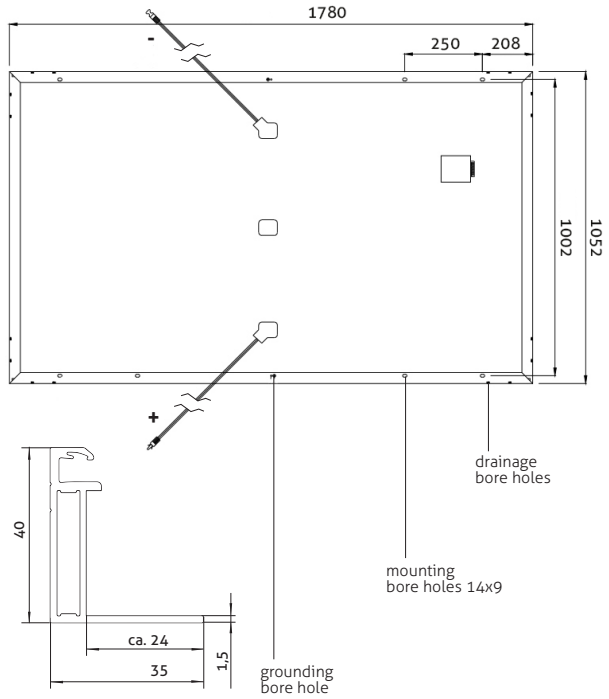
Dimensions



General data

Module technology	Glass-foil laminate; aluminum frame
Covering material Encapsulation Backing material	Tempered solar glass with anti-reflective finish, 3,2 mm EVA-solar cells-EVA Multi-layer composite film, white
Solar cells	120 monocrystalline high power PERC solar cells
Cell dimensions	166 x 83 mm
L x W x H / Weight	$1{,}780^{\pm 2}$ x $1{,}052^{\pm 2}$ x $40^{\pm 0{,}3}$ mm / appr. 21 kg
Connection technology	Cables 2 x 1,0 m/4 mm² Stäubli Electrical MC4-connectors
Bypass diodes	3
Max. system voltage	1,000 V
IP rating	IP68
Application class	II (acc. to IEC 61140)
Fire class	C (acc. to IEC 61730)
Certified mechanical ratings as per IEC 61215	Suction load up to 2,400 Pa (test load 3,600 Pa) Pressure load up to 3,600 Pa (test load 5,400 Pa)
Recommended stress load as per Installation Instructions	Please refer to the specifications in the Installation Instructions and Warranty Conditions.
Qualifications (in preparation)	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}	370 Wp	375 Wp
Nominal voltage V_{MP}	34,0 V	34,1 V
Nominal current I_{MP}	10,9 A	11,0 A
Open circuit voltage V_{OC}	41,7 V	41,9 V
Short circuit current I_{SC}	11,3 A	11,4 A
Module efficiency	19,9 %	20,2 %

Measurement tolerances: Pmax ±5 %; Voc ±10 %; Isc ±10 %, Imp ±10 %
Reverse-current power rating Ir: 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)

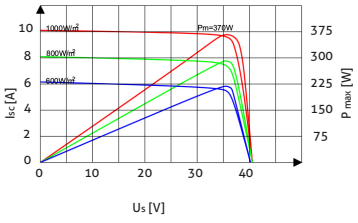
NMOT (Nominal Module Operation Temperature): Irradiation intensity 800 W/m², spectral distribution AM 1,5, Temperature 20 °C
Weak light conditions: Irradiation intensity 200 W/m², Temperature 25°C, Wind speed 1m/s, load operation

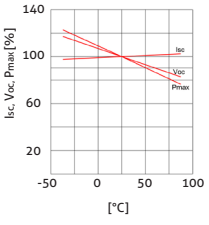
Nominal power $P_{max\ @NMOT}$	275 W	279 W
Nominal power $P_{max\ @200\ W/m²}$	72,0 W	73,0 W

Measurement tolerances: Pmax ±5 %; Voc ±10 %; Isc ±10 %, Imp ±10 %
Reduction of module efficiency when irradiance is reduced from 1000 W/m² to 200 W/m² (at 25 °C): 4 ± 2 % (relative) / –0,6 ± 0,3 % (absolute).

Characteristic lines (Performance Class 370 Wp)

Voltage characteristic line at different temperatures and irradiations





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