

Glass-Glass-Module: Vision 60P style

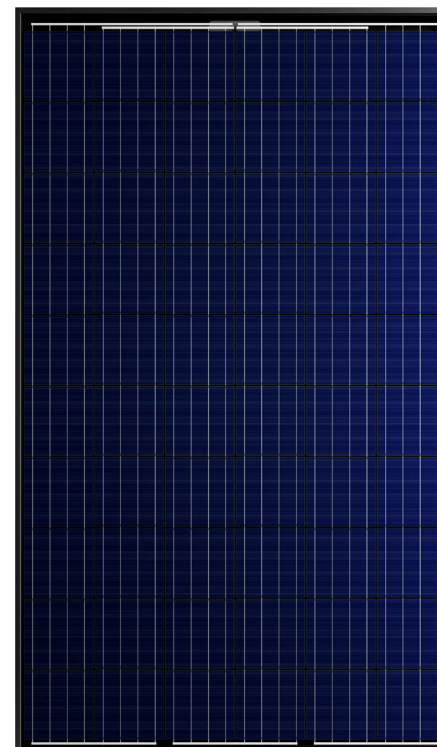
SOLARWATT Solar Modules

THE INNOVATIVE GLASS-GLASS GENERATION VISION 60P STYLE

- Super lightweight thanks to glass just 2 mm thick
- Exceptionally reliable yield rates
- 100 % protection against PID
- Increased fire protection
- Polycrystalline solar cells
- 265 Wp and 270 Wp (100 % plus sorting)

Product Quality

- long-lasting
- resilient
- high-yield
- innovative
- safe
- low-glare
- ammonia resistant
- large hailstone resistant
- salt mist resistant



SOLARWATT Service



SOLARWATT Full Coverage
included (up to 1000 kWp*)



Simple returns policy
as per „Delivery Terms for
SOLARWATT Solar Modules“



Product-warranty
as per „Special Warranty Conditions for
SOLARWATT Solar Modules“



Performance-warranty
on 87 % of nominal power as per „Warranty
Conditions for SOLARWATT Solar Modules“

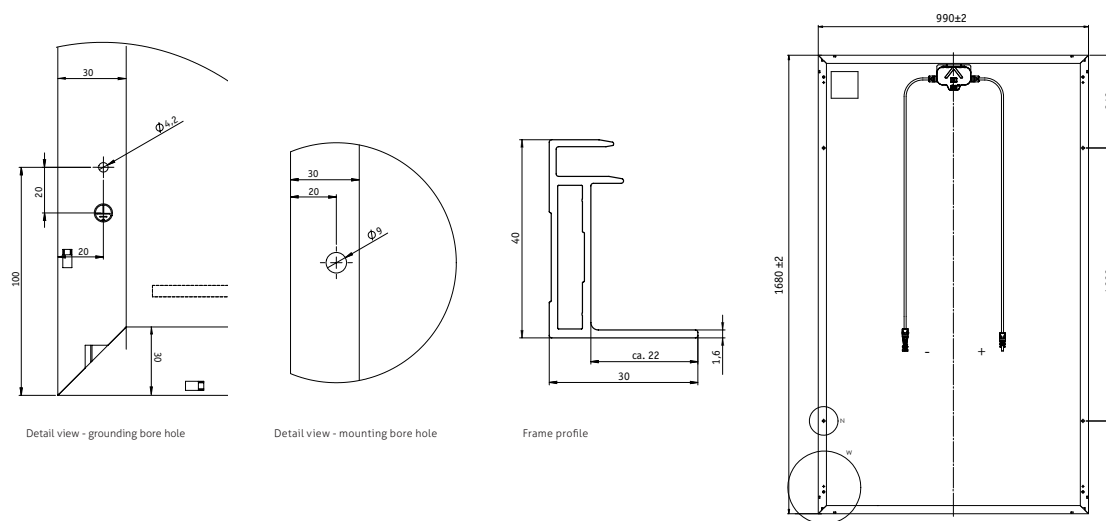


Country of origin
Quality made in Germany

* in Italy up to 50 kWp

Technical Data | Vision 60P style

DIMENSIONS



GENERAL DATA

Module technology	glass-glass laminate; aluminum frame, black anodized
Covering material	Tempered solar glass with anti-reflective finish, 2 mm
Encapsulation	EVA-solar cells-EVA, transparent
Backing material	Tempered solar glass, 2 mm
Solar cells	60 polycrystalline solar cells
Cell dimensions	156 x 156 mm
L x W x H / Weight	1680 ^{±2} x 990 ^{±2} x 40 ^{±0.3} mm / appr. 22,8 kg
Connection technology	Cables 2 x 1,0 m/4 mm ² , Hirschmann HC4-connector
Bypass diodes	3
Application class	A (acc. to IEC 61730)
Max. system voltage	1000 V
Mechanical Ratings as per IEC 61215 Ed.2	Suction load up to 2400 Pa Applied load up to 5400 Pa
Approved stress load as per SOLARWATT Installation Instructions	Applied load up to 3500 Pa (when installed crosswise ¹⁾) Test condition: sliding load of 5400 Pa (conditions take into account safety factors for snow overhang and ice load per Eurocode 1.) 1) Please refer to the specifications in the installation instructions.
Qualifications	IEC 61215 Ed.2 IEC 61730 (including Protection Class II)

ELECTRICAL DATA (STC)

STC: Standard Test Conditions: Irradiation intensity 1000 W/m², spectral distribution AM 1,5 | Temperature 25±2 °C, in accordance to EN 60904-3

Nominal power P _N	265 Wp	270 Wp
Nominal voltage U _{MPP}	31,1 V	31,3 V
Nominal current I _{MPP}	8,62 A	8,73 A
Open circuit voltage U _{OC}	38,2 V	38,4 V
Short circuit current I _{SC}	9,23 A	9,34 A
Module efficiency	16,1 %	16,4 %

Measurement tolerance in reference to P_{max} ±5%;
 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).
 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.

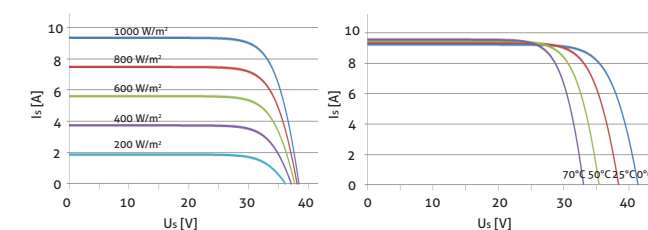
ELECTRICAL DATA (NOCT)

NOCT: Normal Operation Cell Temperature: Irradiation intensity 800 W/m², AM 1,5 | Temperature 20 °C, Wind speed 1m/s, open circuit operation

Nominal power P _N	195 W	198 W
Nominal voltage U _{MPP}	28,7 V	28,9 V
Open circuit voltage U _{OC}	35,8 V	36,0 V
Short circuit current I _{SC}	7,46 A	7,55 A

CHARACTERISTIC LINES (Performance Class 270 Wp)

Voltage characteristic line at different temperatures and irradiances



THERMAL FEATURES

Operating temperature range	-40 ... +85 °C
Ambient temperature range	-40 ... +45 °C
Temperature coefficient P _N	-0,41%/K
Temperature coefficient U _{OC}	-0,31%/K
Temperature coefficient I _{SC}	0,05%/K
NOCT	45 °C