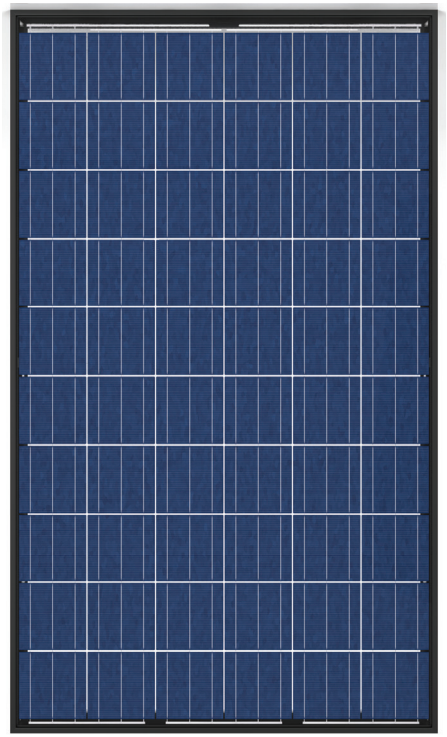
Subject to change | Errors excepted | 2016 SOLARWATT GmbH | AZ-TDB-PMS-0523
This data sheet fulfills the requirements listed in DIN EN 50380:2003 | REV 007 | 11/2016

SOLARWATT®
power to the people

Glass-Glass-Module: SOLARWATT 60P style | **SOLARWATT Solar Modules**

THE INNOVATIVE GLASS-GLASS GENERATION
SOLARWATT 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
- 260 Wp – 270 Wp (100 % plus sorting)



Product Quality

- long-lasting
- resilient
- high-yield
- innovative
- safe
- low-glare
- resistant against ammonia
- resistant against hail
- resistant against salt mist

SOLARWATT Service

SOLARWATT Full Coverage
included (up to 1000 kWp*)

Take-back service
as per „Delivery Terms for SOLARWATT Solar Modules"

Product-warranty
30 years
as per „Special Warranty Conditions for SOLARWATT Solar Modules"

Performance-warranty
30 years
as per „Special Warranty Conditions for SOLARWATT Solar Modules"

Country of origin
Made in Germany
Quality made in Germany

* in Italy up to 50 kWp

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Certified acc. to DIN EN ISO 9001 and 14001 | BS OHSAS 18001:2007

Technical Data | **SOLARWATT 60P style**

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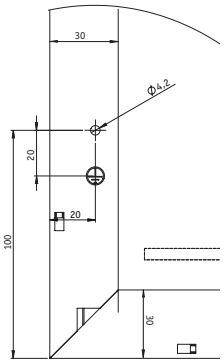
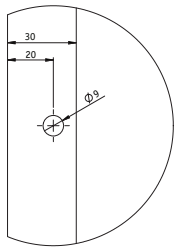
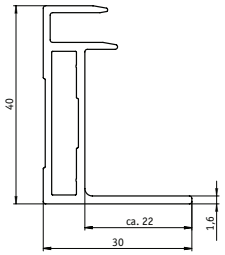
DIMENSIONS



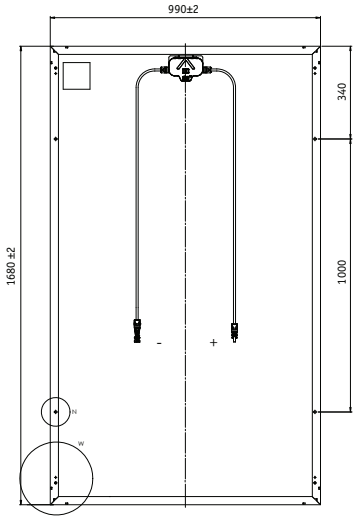
Detail view - grounding bore hole



Detail view - mounting bore hole



Frame profile



GENERAL DATA

Module technology	Glass-Glass Laminate; aluminum frame, black anodized
Covering material Encapsulation Backing material	Tempered solar glass with anti-reflective finish, 2 mm EVA-solar cells-EVA Solar glass, 2 mm
Solar cells	60 polycrystalline solar cells
Cell dimensions	156 x 156 mm
L x W x H / Weight	$1680^{\pm 2}$ x $990^{\pm 2}$ x $40^{\pm 0,3}$ mm / appr. 22,8 kg
Connection technology	Cables 2 x 1,0 m/4 mm², 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)

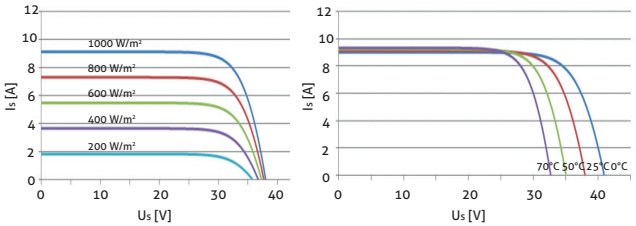
STC: Standard Test Conditions: Irradiation intensity 1000 W/m², spectral distribution AM 1,5 | Temperature 25±2 °C, in accordance to EN 60904-3

Nominal power P_N	260 Wp	265 Wp	270 Wp
Nominal voltage U_{MPP}	30,9 V	31,1 V	31,3 V
Nominal current I_{MPP}	8,51 A	8,62 A	8,73 A
Open circuit voltage U_{OC}	38,0 V	38,2 V	38,4 V
Short circuit current I_{SC}	9,12 A	9,23 A	9,34 A

Measurement tolerance in reference to Pmax ±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.

CHARACTERISTIC LINES (Performance Class 260 Wp)

Voltage characteristic line at different temperatures and irradiations



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	191 W	195 W	198 W
Nominal voltage U_{MPP}	28,5 V	28,7 V	28,9 V
Open circuit voltage U_{OC}	35,6 V	35,8 V	36,0 V
Short circuit current I_{SC}	7,37 A	7,46 A	7,55 A

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