SOLARWATT **Solar Modules**

Glass-Foil-Module: SOLARWATT **BLUE 60P**

SOLARWATT®
Systemintelligenz

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

Made in Dresden

- SOLARWATT solar modules are exclusively produced in Germany.

Standard Warranty

- 10 year product warranty
- Staggered performance warranty covering 25 years

Extended warranty by purchasing SOLARWATT Full Coverage insurance

- 12 year product warranty
- Linear performance warranty covering 25 years

According to the „Special warranty conditions for SOLARWATT solar modules“

MAX 5400 PA*

*Test requirements: see rear of data sheet

SOLARWATT Service

SOLARWATT Total Protection
included (up to 1.000 kWp)

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

Made in Dresden

Country of origin
Quality made in Germany

12 years

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

25 years

Performance-warranty
as per Special Warranty Conditions for SOLARWATT Solar Modules

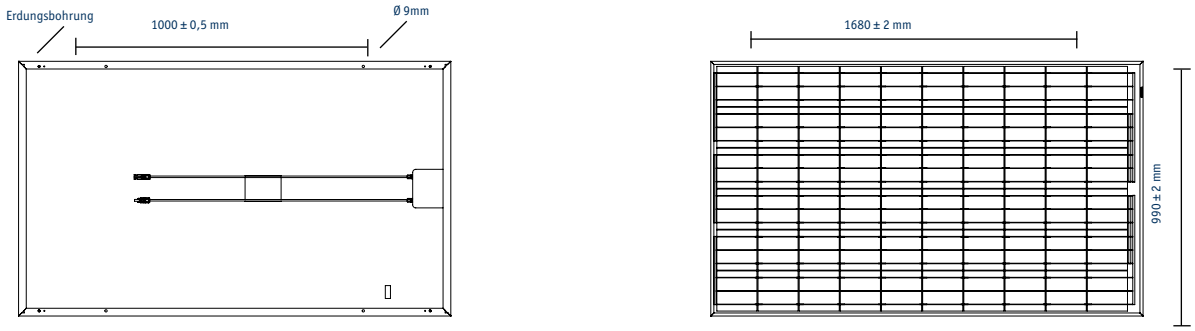
Product Quality

- long-lasting
- resilient
- high-yield
- innovative
- low-glare
- safe
- NH_3 resistant against ammonia
- resistant against hail
- NaCl resistant against salt mist

SOLARWATT Expert Installer

Technical Data *Glass-Foil-Module: SOLARWATT BLUE 60P*

Dimensions



L x B x D	1680 x 990 x 40 mm (+/-2 mm)
Connection technology	Cabels 2 x 1,0 m/4 mm², PV4 - Connector, Plug in arrangement analog MC4
Weight	ca. 19 kg

Electrical Data (STC)

STC: Standard Test | Conditions: Irradication intensity 1000 W/m², spectral distribution AM 1.5 | temperatur 25±2 °C, in accordance EN 60904-3

	SOLARWATT BLUE 60P			
Nominal power P_N	245 Wp	250 Wp	255 Wp	260 Wp
Nominal voltage U_{mpp}	30,1 V	30,2 V	30,4 V	30,6 V
Nominal current I_{mpp}	8,14 A	8,28 A	8,39 A	8,53 A
Open circuit voltage U_{OC}	37,4 V	37,6 V	37,8 V	38,0 V
Short circuit current I_{SC}	8,57 A	8,69 A	8,77 A	8,86 A
IR*	20 A			

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: 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 | temperatur 20 °C, Wind speed 1m/s, open circuit operation

	SOLARWATT BLUE 60P			
Nominal power P_N	180 W	184 W	188 W	191 W
Nominal voltage U_{mpp}	27,8 V	27,9 V	28,1 V	28,3 V
Nominal circuit voltage U_{OC}	31,1 V	35,3 V	35,5 V	35,7 V
Short circuit current I_{SC}	6,94 A	7,04 A	7,10 A	7,18 A

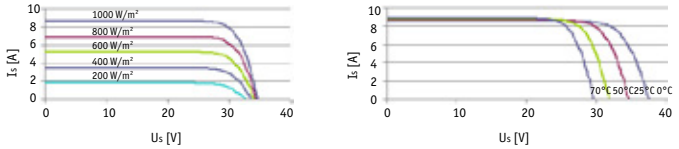
General Data

Module technology	Glass-foil-laminate; aluminium frame
Covering material **Encapsulation** **Backing material**	High-transparency solar glass (tempered), 2 mm EVA-solar cells-EVA, white Multi-layer composite film
Solar cells	60 polycrystalline solar cells
Cell dimensions	156 x 156 mm
Bypass diodes	3
Application class	Application class A (acc. to IEC 61730)
Max. system voltage	1000 V
Mechanical Ratings as per IEC 61215 Ed.	Suction load up to 2,400 Pa Applied load up to 5,400 Pa
Approved stress load as per SOLARWATT Installation Instructions	Applied load up to 3.500 Pa (when installed crosswise[1]) Test condition: sliding load of 5,400 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)

Characteristic Lines

Voltage characteristic line at different temperatures and irradiation

Performance class 270 Wp SOLARWATT BLUE 60P



Thermal Features

	SOLARWATT BLUE 60P
Operating temperature range	-40 ... +85 °C
Ambient temperature range	-40 ... +45 °C
Temperature coefficient P_N	-0,38%/K
Temperature coefficient U_{OC}	-0,33 %/K
Temperature coefficient I_{SC}	0,04 %/K
NOCT	45 °C