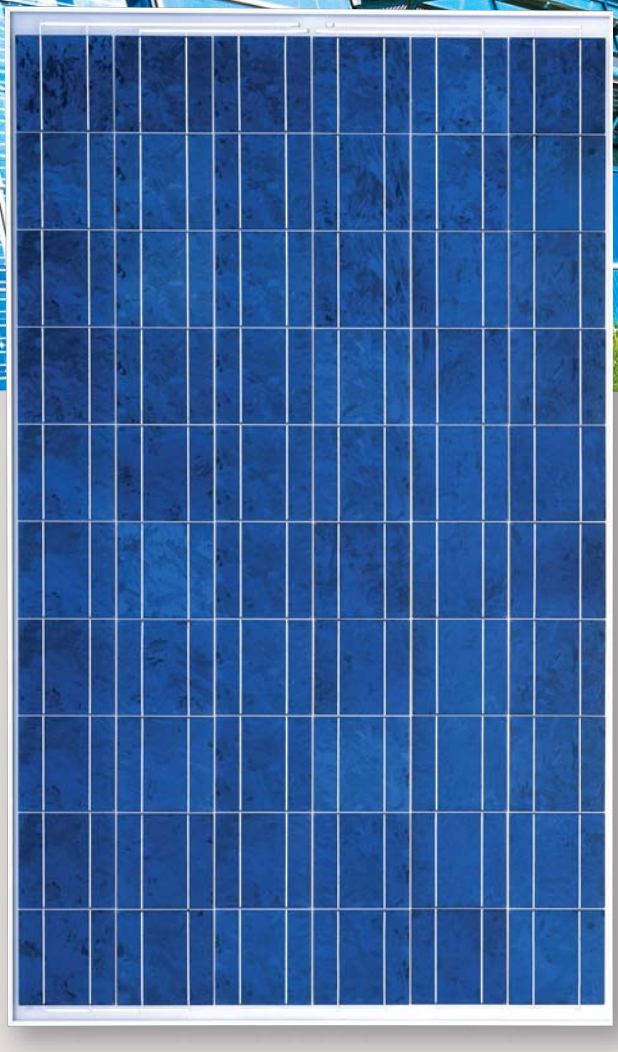
Solar Module
Solar-Fabrik Series SF 200A



Top quality across the entire range:

- Long term stability by use of highly transparent, specially doped solar glass with UV blocker.
- 100% preselection of cells
- Highest energy output achieved by careful processing and exact tuning of components (cp. „Power Check“ Report, Fraunhofer ISE)
- State of the art manufacturing technology and certified quality management (ISO 9001) guarantee best quality of products „made in Germany“.
- With specially developed aluminium frame; rapid and versatile fitting with patented Profilink mounting system; recessed retaining elements for attractive appearance
- Increased load bearing capacity: 5400 Pa according to IEC 61215
- Very narrow selection limits of only +/- 5 W (2.5%) remove the need to preselect panels.
- Calibration modules for output measurement regularly tested at Fraunhofer Institute for Solar Energy Systems

Dimensions

Series SF 200A	Alu frame
L x W (mm)	1667 x 998
Thickness (mm)	50
Weight (kg)	24.0

Qualifications/Certificate

EN IEC 61215 ed. 2
Class II protection
Guideline 89/336/EWG (CE)
Guideline 73/23/EWG (CE)

solar fabrik

Module data Solar-Fabrik Series SF 200A

Type of module	SF 200A-200	SF 200A-210	SF 200A-220
Solar cells per module (polycristalline)	60	60	60
Max. system voltage	1000 V	1000 V	1000 V

Electrical data under STC (Standard Test Conditions: 1000 W/m², 25°C, AM 1.5)

Nominal Power*	P_{max}	200 W	210 W	220 W
Sorting limits		+/- 5 W	+/- 5 W	+/- 5 W
Voltage approx.	U_{MPP}	27,60 V	27,90 V	28,60 V
Open circuit voltage approx.	U_{OC}	35,00 V	35,80 V	36,40 V
Current approx.	I_{MPP}	7,27 A	7,48 A	7,70 A
Short circuit current approx.	I_{SC}	7,77 A	7,96 A	8,15 A

Electrical data at 800 W/m², NOCT, AM 1.5

Performance at MPP approx.	P_{max}	154 W	161 W	169 W
Voltage approx.	U_{MPP}	26,60 V	27,21 V	27,67 V
Open circuit voltage approx.	U_{OC}	27,88 V	28,18 V	28,89 V
Current approx.	I_{MPP}	5,53 A	5,69 A	5,85 A
Short circuit current approx.	I_{SC}	5,83 A	5,97 A	6,12 A

At an incident solar irradiance level of 200 W/m² and 25°C, efficiency is decreased by approx. 7% compared with the efficiency measured at STC.

Temperature data

Temperature coefficient voltage	$T_K(U_{OC})$	-120 mV/K
Temperature coefficient current	$T_K(I_{SC})$	5,45 mA/K
NOCT		49°C +/-3K

Further information

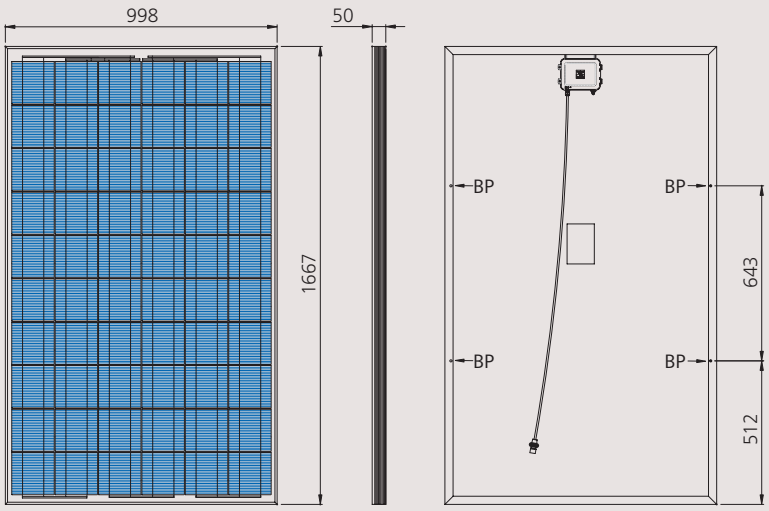
Connection technology	Lumberg system: connecting cabel 4mm² with overmolded plug and chassis socket
High voltage test	test voltage 3200 V_{DC}/max. 60µA
Hail resistance**	up to 25 mm diameter at 23 m/s
Storm resistance**	Wind speed up to 130 km/h = 800 Pa and safety factor 3
Snow load** Load bearing capacity according to IEC 61215	with frame: 5400 Pa ≙ 550 kg/m²

* (+/- 5% tolerance of measurement)

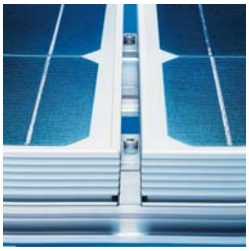
** in combination with our patented Profilink mounting system and the indicated attachment points (AP)

Warranty on electrical performance, 25 years according to our additional terms of warranty, which we will be glad to send you.

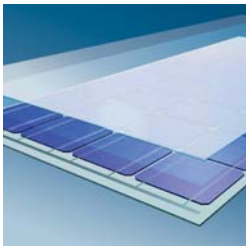
Certified by VDE according to DIN EN ISO 9001; Reg.Nr. 5002983/QM/11.2003 / DIN EN ISO 14001; Reg.Nr. 5002983/UM/11.2003



SF 200A framed



Efficient mounting system Profilink



Module assembly:
Panel construction: Specially hardened low-iron glass, light-permeable ethyl-vinyl acetate (EVA) film, solar cells, EVA, Tedlar backing film.

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