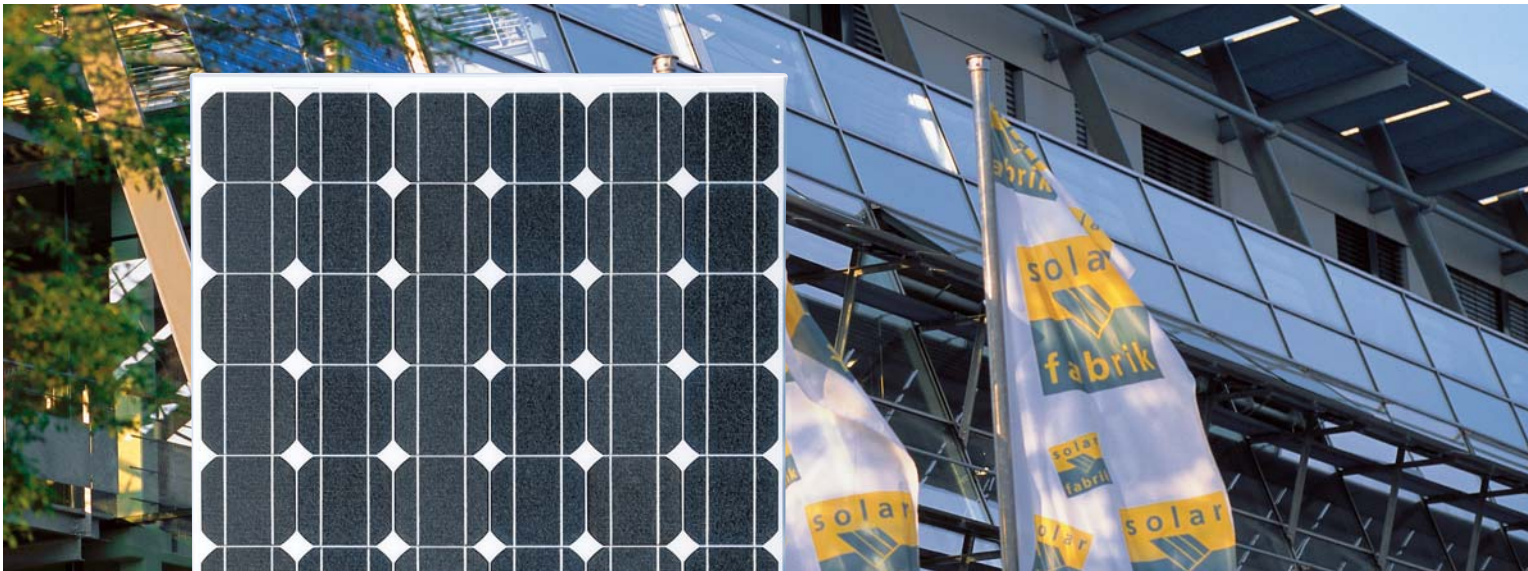


# Solar Module

## Solar-Fabrik Series SF 150/10A



### 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“.
- Optionally available with specially developed aluminium frame; rapid and versatile fitting with patented Profilink mounting system; recessed retaining elements for attractive appearance
- Increased load capacity: 5400 Pa according to IEC 61215
- Very narrow selection limits of only +/- 2.5 W ( $\approx$  1.6%) remove the need to preselect panels.
- Calibration modules for output measurement regularly tested at Fraunhofer Institute for Solar Energy Systems

### Dimensions

Series SF 150/10A	Alu frame
L x B (mm)	1593 x 801
Dicke (mm)	35
Gewicht (kg)	15,5

### Qualifications/Certificate

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



**Module data** Solar-Fabrik Series SF 150/10A

Type of module	SF 150/10A-155	SF 150/10A-160	SF 150/10A-165
Solar cells per module (monocrystalline)	72	72	72
Max. system voltage	1000 V	1000 V	1000 V

**Electrical data** under STC (Standard Test Conditions: 1000 W/m<sup>2</sup>, 25°C, AM 1.5)

Nominal Power*	P <sub>max</sub>	155 W	160 W	165 W
Sorting limits		+/- 2,5 W	+/- 2,5 W	+/- 2,5 W
Voltage approx.	V <sub>MPP</sub>	35,00 V	35,50 V	36,00 V
Open circuit voltage approx.	V <sub>OC</sub>	43,50 V	43,90 V	44,30 V
Current approx.	I <sub>MPP</sub>	4,43 A	4,51 A	4,59 A
Short circuit current approx.	I <sub>SC</sub>	4,97 A	5,02 A	5,07 A

**Electrical data** at 800 W/m<sup>2</sup>, NOCT, AM 1.5

Performance at MPP approx.	P <sub>max</sub>	112 W	116 W	119 W
Voltage approx.	V <sub>MPP</sub>	31,40 V	31,90 V	32,30 V
Open circuit voltage approx.	V <sub>OC</sub>	39,50 V	39,90 V	40,30 V
Current approx.	I <sub>MPP</sub>	3,60 A	3,60 A	3,70 A
Short circuit current approx.	I <sub>SC</sub>	4,00 A	4,00 A	4,10 A

At an incident solar irradiance level of 200 W/m<sup>2</sup> and 25°C, efficiency is decreased by approx. 6% compared with the efficiency measured at STC..

**Temperature data**

Temperature coefficient voltage	T <sub>K</sub> (U <sub>OC</sub> )	-154 mV/K
Temperature coefficient current	T <sub>K</sub> (I <sub>SC</sub> )	1,00 mA/K
NOCT		48°C +/- 2K

**Further information**

Connection technology	Lumberg system: 1.2 m connecting cable 4 mm <sup>2</sup> with overmolded plug and chassis socket
High voltage test	test voltage 3200 V <sub>DC</sub> /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**	with frame: 5400 Pa $\hat{=}$ 550 kg/m <sup>2</sup>
Load capacity according to IEC 61215	

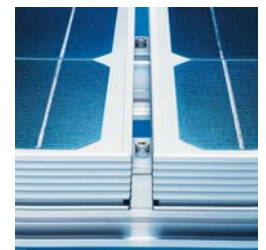
\* (+/- 5% tolerance of measurement)

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

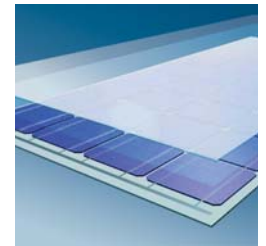
Subject to technical modifications and appropriate post-certification without prior notice

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

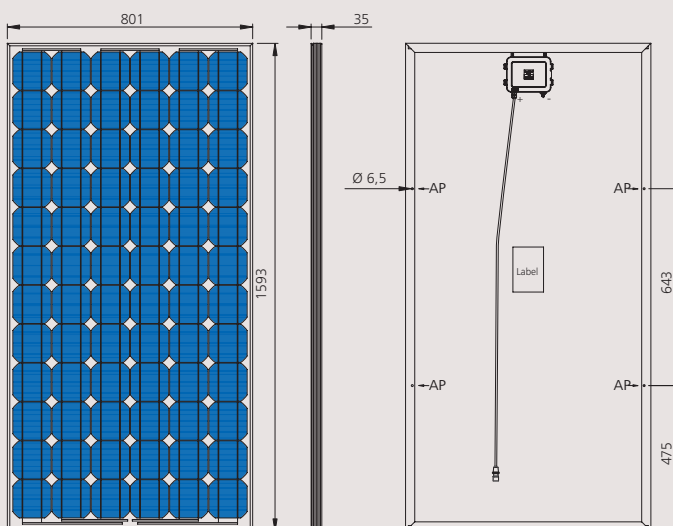
Certified by VDE according to DIN EN ISO 9001; Reg.Nr. 5002983/QM/11.2003 / DIN EN ISO 14001; Reg.Nr. 5002983/UM/11.2003



Efficient mounting system Profilink



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



SF 150/10A framed



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