



Play it safe



Professional Modules  
MADE IN GERMANY

**Professional 54 poly**  
**Professional 54 poly | black frame**  
**Professional 54 poly black**

225 W • 230 W • 235 W • 240 W

- Salt mist resistance
- Ammonia resistance
- Frame height 40 mm
- 10-year product warranty
- 25-year linear performance warranty



Identical to the „S-Class Excellent“  
module as produced by former  
Centrosolar Sonnenstromfabrik GmbH  
until July 2014.

# Professional 54

poly, poly | black frame, poly black

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

Rated power	$P_{MPP}$	225 W	230 W	235 W	240 W
Sorting limits of performance		0/+5 W	0/+5 W	0/+5 W	0/+5 W
Voltage	$U_{MPP}$	26.97 V	27.21 V	27.47 V	27.69 V
Open circuit voltage	$U_{OC}$	33.75 V	33.95 V	34.23 V	34.40 V
Current	$I_{MPP}$	8.35 A	8.46 A	8.56 A	8.67 A
Short-circuit current	$I_{SC}$	8.94 A	9.02 A	9.11 A	9.19 A
Efficiency		15.1 %	15.5 %	15.8 %	16.1 %

Electrical data at 800 W/m<sup>2</sup>, NOCT (46°C +/- 2K), AM 1.5

Power in MPP	$P_{MPP}$	168 W	171 W	175 W	179 W
Voltage	$U_{MPP}$	25.27 V	25.64 V	25.73 V	25.93 V
Open circuit voltage	$U_{OC}$	31.78 V	31.97 V	32.22 V	32.38 V
Current	$I_{MPP}$	6.65 A	6.69 A	6.82 A	6.91 A
Short-circuit current	$I_{SC}$	7.19 A	7.24 A	7.33 A	7.40 A

The efficiency decreases by approximately 3% compared to the efficiency under STC at an irradiation of 200 W/m<sup>2</sup> and 25 °C.

## Temperature data

Power temperature coefficient	$T_K (P_{MPP})$	-0.43 %/K
Voltage temperature coefficient	$T_K (U_{OC})$	-0.35 %/K
Current temperature coefficient	$T_K (I_{SC})$	0.03 %/K

## Further information

Number of cells	54
Max. system voltage	1000 V
Reverse current loading capability	15 A
Front cover	Special hardened low-iron glass with anti-reflex coating, Glare reduced to a minimum
Module connection	Junction box 3 bypass diodes IP 67, no potting, 2 x approx. 1 m solar cable Ø 4 mm <sup>2</sup> , plug connector PV4 IP 68
Snow load*	Up to 5400 Pa $\hat{=}$ 550 kg/m <sup>2</sup>

10-year product warranty, 25-year linear performance warranty according to our additional warranty conditions for solar power modules of the „Professional“ product series, which we will gladly send you.

Subject to technical modifications with corresponding follow-up certifications. Errors excepted.

\*Load tested according to EN IEC 61215 (ed. 2) in compliance with the installation and operating manual.

## Certifications

EN IEC 61215 (ed. 2)<sup>1</sup>

EN IEC 61730-1,-2<sup>1</sup>

EN 13501-1, class E<sup>1</sup>

IEC 61701<sup>1</sup>

IEC 62716<sup>1</sup>

Protection class II

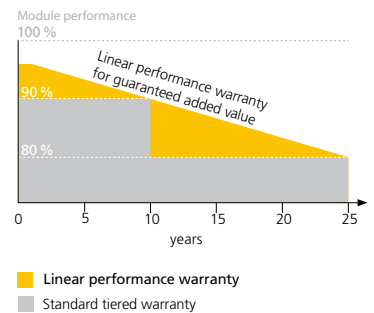
Directive 2014/35/EU

MCS

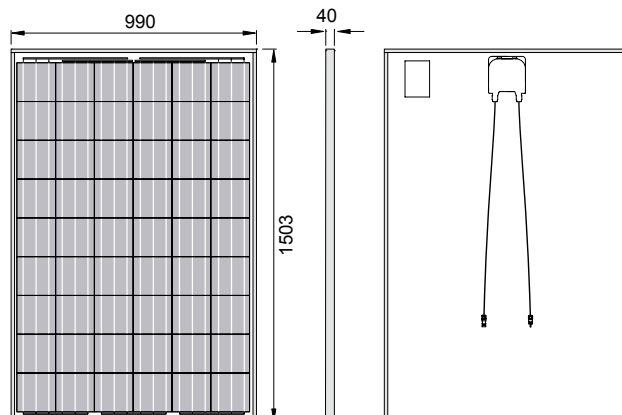
<sup>1</sup>Subject to follow-up certifications.



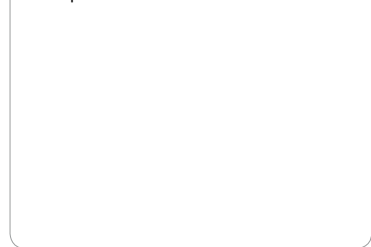
- Qualified, EN IEC 61215 (ed. 2)
- Safety tested, EN IEC 61730-1,-2
- Salt mist resistance tested, IEC 61701
- Ammonia resistance tested, IEC 62716
- Periodic inspection



**Professional 54** poly  
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 Weight: approx. 17,5 kg



Your specialist dealer:



**Solar-Fabrik AG**  
 Munzinger Str. 10  
 79111 Freiburg  
 Germany  
 Phone +49 (0)761 4000-0  
 Fax +49 (0)761 4000-199  
 info@solar-fabrik.de  
 www.solar-fabrik.de