



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/m², 25 °C, AM 1.5)

Rated power	P_{MPP}	225 W	230W	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 %

Measurement tolerances STC: +/- 3% (P_{MPP}); +/- 10% (I_{SC} , U_{OC} , I_{MPP} , U_{MPP})

Electrical data at 800 W/m², 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/m² 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
Back cover	poly, poly black frame poly black
	White backsheet Black backsheet
Module connection	Junction box 3 bypass diodes IP 65 no potting, 2 x approx. 1 m solar cable Ø 4 mm ² , plug connector KSK4 IP 65
Snow load*	Up to 5400 Pa $\hat{=}$ 550 kg/m ²

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.

Slight colour variation of modules is possible due to specific conditions in production.

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

Certifications

EN IEC 61215 (ed. 2)¹

EN IEC 61730-1,-2¹

IEC 61701¹

IEC 62716¹

Protection class II

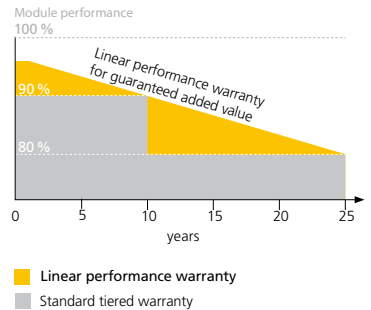
Directive 2006/95/EG (CE)

MCS

¹Subject 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

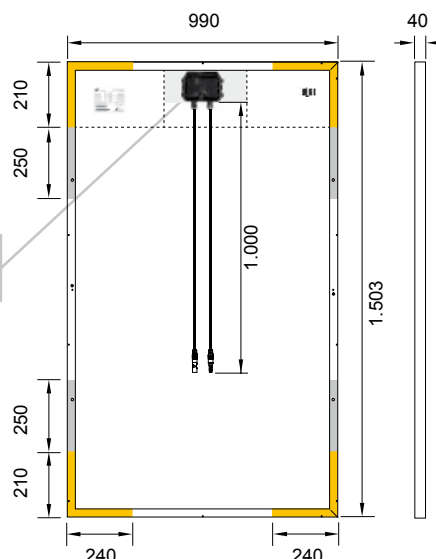


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 Weight: approx. 17,5 kg

No contact between junction box and mounting profile permitted in this area

Clamping areas:

- Approved up to 2400 Pa
- Approved up to 5400 Pa



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