

# S-Class Excellent

205 Wp ■ 210 Wp ■ 215 Wp ■ 220 Wp ■ 225 Wp ■ 230 Wp

## Design and yield at their best

- 54 poly- or monocrystalline cells
- Power classes from 205 Wp to 230 Wp
- Improved performance by positive performance classification
- Module efficiency up to 15.5%
- Manufactured in the CENTROSOLAR “Sonnenstromfabrik”, according to DIN EN ISO 9001:2008 and 14001:2009
- Higher module power density for better performance and easier handling during installation
- Award-winning anti-reflective solar glass produces higher financial yields
- Designed and certified to support loads up to 5400 Pa: double the minimum IEC standard
- Certified for coastal regions
- Black frame, black back sheet
- 10 years product warranty\*
- Up to 26 years performance warranty\*



\* You can find detailed information in the Centrosolar AG warranty conditions.



- Qualified, IEC 61215
- Safety tested, IEC 61730
- Periodic Inspection



Salt spray test according to DIN EN ISO 9227-NSS



## S-Class Excellent monocrystalline

### Output under STC\*

Module type	S 215M54 Excellent	S 220M54 Excellent	S 225M54 Excellent	S 230M54 Excellent	
Rated output (Pmpp)	215	220	225	230	Wp
Short-circuit current (Isc)	8.71	8.78	8.94	9.10	A
Open-circuit voltage (Uoc)	32.83	32.89	32.94	32.99	V
Voltage (Umpp)	26.88	27.26	27.61	27.98	V
Current (Impp)	8.00	8.07	8.15	8.22	A
Module efficiency $\eta$	14.5	14.8	15.1	15.5	%

\* Under standard testing conditions STC (1.000 W/m<sup>2</sup>, spectrum AM 1.5, cell temperature 25 °C)

### Output at 800 W/m<sup>2</sup>, NOCT, AM 1.5

Module type	S 215M54 Excellent	S 220M54 Excellent	S 225M54 Excellent	S 230M54 Excellent	
Rated output (Pmpp)	155	159	162	166	Wp
Short-circuit current (Isc)	6.99	7.05	7.18	7.30	A
Open-circuit voltage (Uoc)	29.76	29.81	29.86	29.90	V
Voltage (Umpp)	23.76	24.10	24.41	24.74	V
Current (Impp)	6.52	6.58	6.64	6.70	A

### Thermal properties

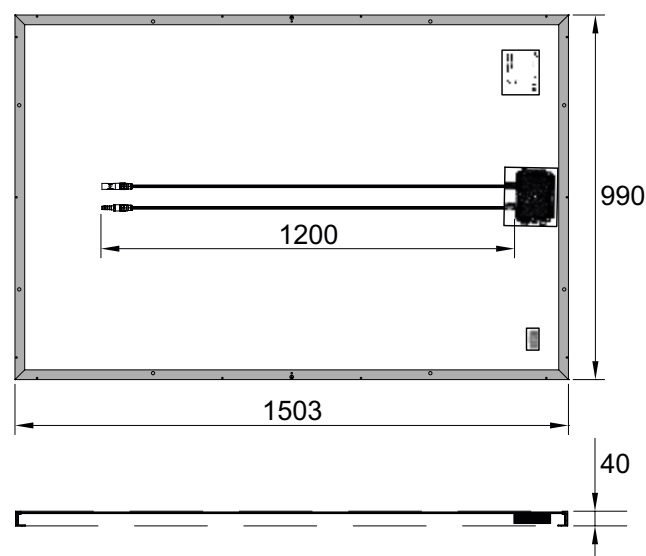
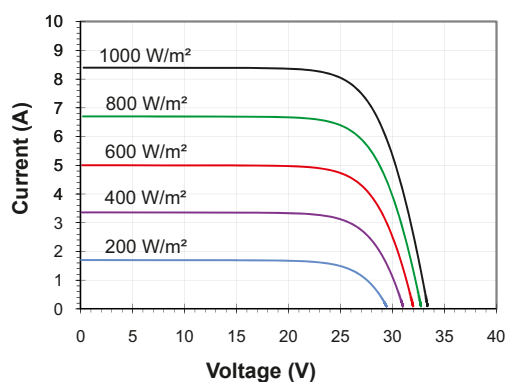
TK Pmpp	-0.45 %/K
TK Uoc	-0.36 %/K
TK Isc	0.028 %/K
NOCT	46 ± 2 °C

### Other technical data

Class range (positive classification)	-0/+4.99 W
Max. system voltage	1000 V
Weight	17.5 ± 0.5 kg
Reverse current carrying capacity IR	15 A
Measuring accuracy Pmpp at STC	± 3 %

### Materials used

Number of cells	54
Cell dimensions	156 mm x 156 mm
Front	hardened solar glass
Junction box	IP65



## S-Class Excellent polycrystalline

### Output under STC\*

Module type	S 205P54 Excellent	S 210P54 Excellent	S 215P54 Excellent	S 220P54 Excellent	
Rated output (Pmpp)	205	210	215	220	Wp
Short-circuit current (Isc)	8.49	8.66	8.71	8.78	A
Open-circuit voltage (Uoc)	32.67	32.78	32.83	32.89	V
Voltage (Umpp)	26.38	26.45	26.88	27.26	V
Current (Impp)	7.77	7.94	8.00	8.07	A
Module efficiency $\eta$	13.8	14.1	14.5	14.8	%

\* Under standard testing conditions STC (1.000 W/m<sup>2</sup>, spectrum AM 1.5, cell temperature 25 °C)

### Output at 800 W/m<sup>2</sup>. NOCT. AM 1.5

Module type	S 205P54 Excellent	S 210P54 Excellent	S 215P54 Excellent	S 220P54 Excellent	
Rated output (Pmpp)	148	151	155	159	Wp
Short-circuit current (Isc)	6.81	6.95	6.99	7.05	A
Open-circuit voltage (Uoc)	29.61	29.71	29.76	29.81	V
Voltage (Umpp)	23.31	23.38	23.76	24.10	V
Current (Impp)	6.33	6.47	6.52	6.58	A

### Thermal properties

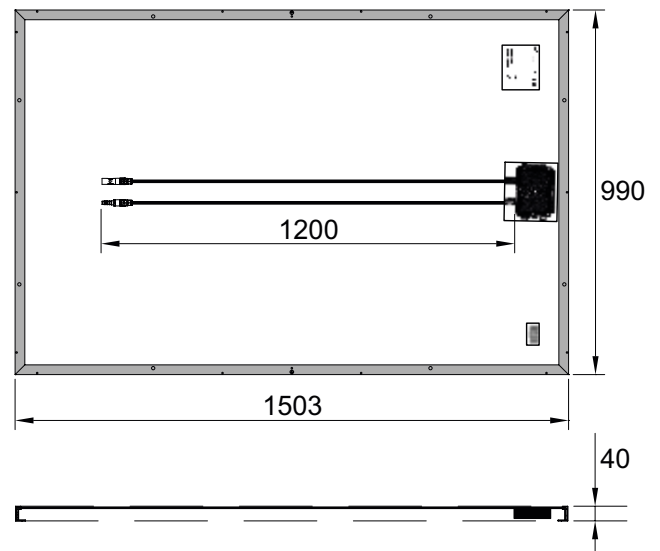
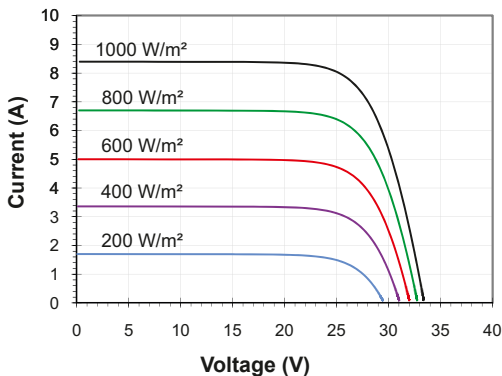
TK Pmpp	-0.45 %/K
TK Uoc	-0.36 %/K
TK Isc	0.028 %/K
NOCT	46 ± 2 °C

### Other technical data

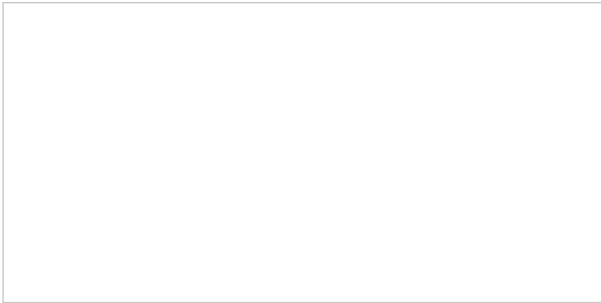
Class range (positive classification)	-0/+4.99 W
Max. system voltage	1000 V
Weight	17.5 ± 0.5 kg
Reverse current carrying capacity IR	15 A
Measuring accuracy Pmpp at STC	± 3 %

### Materials used

Number of cells	54
Cell dimensions	156 mm x 156 mm
Front	hardened solar glass
Junction box	IP65



Your CENTROSOLAR partner:



## Sunshine is our business.

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