

Modules

# S-Class Integration Deluxe

185 Wp ■ 190 Wp

## S-Class Integration

185 Wp ■ 190 Wp ■ 195 Wp

The in-roof system - design and yield at their best

- especially attractive design solutions
- in-roof PV panels with Solrif frame
- safe and easy to install
- building statics and waterproofing verified
- highest yields even in diffused light
- award-winning anti-reflective glass
- lockable plug connectors
- positive performance classification
- manufactured in the CENTROSOLAR Sonnenstromfabrik, certified according to DIN EN ISO 9001:2008 and 14001:2009
- up to 10 years product warranty\*;  
up to 26 years performance warranty\*



Quality

Made in  
Germany



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



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

## S-Class Integration Deluxe monocrystalline

### Output under STC\*

Module type	S 185M50 Integration Deluxe	S 190M50 Integration Deluxe	
Rated output (Pmpp)	185	190	Wp
Short-circuit current (Isc)	8.15	8.33	A
Open-circuit voltage (Uoc)	30.40	30.50	V
Voltage (Umpp)	24.10	24.15	V
Current (Impp)	7.68	7.87	A
Module efficiency $\eta$	13.4	13.7	%

\* 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 185M50 Integration Deluxe	S 190M50 Integration Deluxe	
Rated output (Pmpp)	133	137	Wp
Short-circuit current (Isc)	6.54	6.69	A
Open-circuit voltage (Uoc)	27.55	27.65	V
Voltage (Umpp)	21.31	21.38	V
Current (Impp)	6.26	6.41	A

### Thermal properties

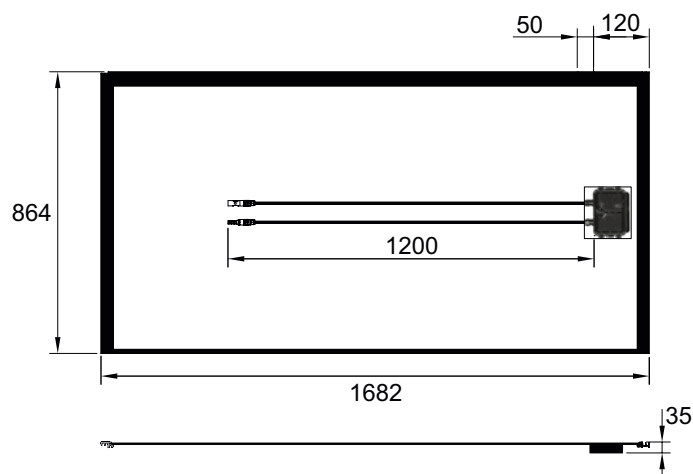
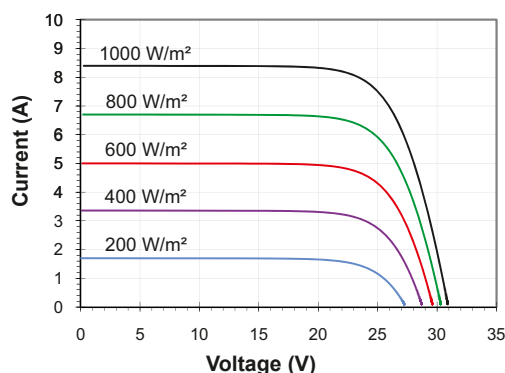
TK Pmpp	-0.43 %/K
TK Uoc	-0.36 %/K
TK Isc	0.03 %/K
NOCT	46 °C

### 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	12 A
Measuring accuracy Pmpp at STC	± 3 %

### Materials used

Number of cells	50
Cell dimensions	156 mm x 156 mm
Front	tempered solar glass
Junction box	IP65



## S-Class Integration Deluxe polycrystalline • S-Class Integration polycrystalline

### Output under STC\*

Module type	S 185P50 Integration Deluxe	S 190P50 Integration Deluxe	S 185P50 Integration	S 190P50 Integration	S 195P50 Integration	
Rated output (P <sub>mpp</sub> )	185	190	185	190	195	Wp
Short-circuit current (I <sub>sc</sub> )	8.09	8.27	8.09	8.27	8.45	A
Open-circuit voltage (U <sub>oc</sub> )	30.65	30.75	30.65	30.75	30.85	V
Voltage (U <sub>mpp</sub> )	24.10	24.15	24.10	24.15	24.20	V
Current (I <sub>mpp</sub> )	7.68	7.87	7.68	7.87	8.06	A
Module efficiency $\eta$	13.4	13.7	13.4	13.7	14.1	

\* 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 185P50 Integration Deluxe	S 190P50 Integration Deluxe	S 185P50 Integration	S 190P50 Integration	S 195P50 Integration	
Rated output (P <sub>mpp</sub> )	133	137	133	137	140	Wp
Short-circuit current (I <sub>sc</sub> )	6.49	6.64	6.49	6.64	6.78	A
Open-circuit voltage (U <sub>oc</sub> )	27.78	27.87	27.78	27.87	27.96	V
Voltage (U <sub>mpp</sub> )	21.31	21.35	21.31	21.35	21.40	V
Current (I <sub>mpp</sub> )	6.26	6.41	6.26	6.41	6.51	A

### Thermal properties

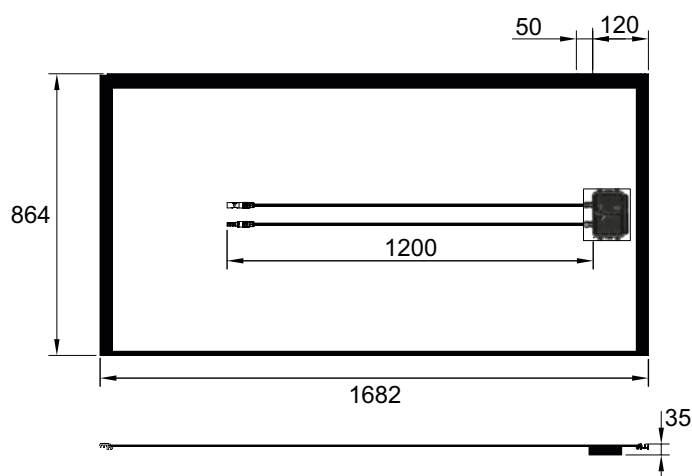
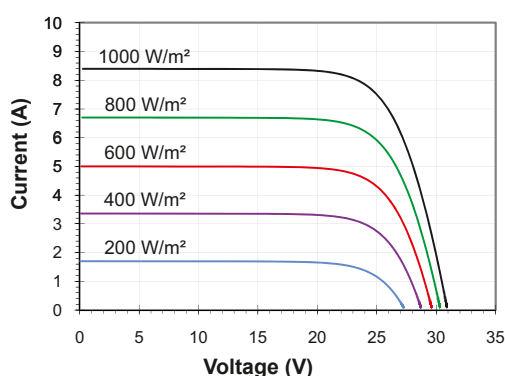
TK P <sub>mpp</sub>	-0.45 %/K
TK U <sub>oc</sub>	-0.36 %/K
TK I <sub>sc</sub>	0.028 %/K
NOCT	46 °C

### Other technical data

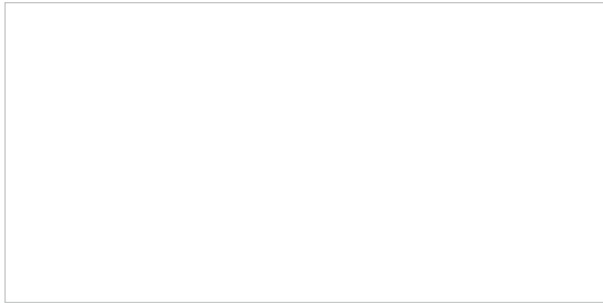
Class range (positive classification)	-0/+4.99 W
Max. system voltage	1000 V
Weight	17.5 ± 0.5 kg
Reverse current carrying capacity I <sub>R</sub>	12 A
Measuring accuracy P <sub>mpp</sub> at STC	± 3 %

### Materials used

Number of cells	50
Cell dimensions	156 mm x 156 mm
Front	tempered solar glass
Junction box	IP65



Your CENTROSOLAR partner:



## Sunshine is our business.

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