



## S-Series

55 W ■ 60 W ■ 90 W ■ 100 W ■ 130 W ■ 140 W

### Premium quality – for professional use

- Solar modules with 36 high-performance solar cells
- High performance also during low irradiation and months with diminished light
- Salt spray corrosion tested according to DIN EN ISO 9227-NSS
- Ammonia resistant
- Sturdy, seawater-resistant aluminium frame
- Frost resistant frame construction
- Large, waterproof junction box equipped with spring-type terminals
- Weather and water proof foil provides highest life expectancy even under extreme climatic conditions
- Manufactured exclusively in the CENTROSOLAR Sonnenstromfabrik, certified according to DIN EN ISO 9001:2008 and ISO 14001:2009
- 5 years product warranty\*, up to 26 years performance guarantee\*



\* 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



## SOLARA S-Series

### Output under STC\*

Module type	S220M36 Ultra	S240M36 Ultra	S360M36 Ultra	S365P36 Ultra	S405M36 Ultra	S520P36 Ultra	S560P36 Ultra	
Daily output in summer in Germany (Ø)	220	240	360	365	400	520	560	Wh/d
Rated output (P <sub>mpp</sub> )	55	60	90	90	100	130	140	Wp
Short-circuit current (I <sub>sc</sub> )	3.40	4.00	5.45	5.70	6.20	8.20	8.42	A
Open-circuit voltage (U <sub>oc</sub> )	21.30	21.90	21.68	21.90	21.50	21.90	21.80	V
Voltage (U <sub>mpp</sub> )	17.60	17.40	18.00	17.40	17.20	17.40	17.90	V
Current (I <sub>mpp</sub> )	3.10	3.70	5.00	5.20	5.90	7.50	7.82	A
Module efficiency (η)	11.8	11.4	13.1	12.4	14.5	12.7	13.7	%

\* Under standard testing conditions STC (1,000 W/m<sup>2</sup>, spectrum 1.5, cell temperature 25 °C)

### Output at 800 W/m<sup>2</sup>, NOCT, AM 1,5

Rated output (P <sub>mpp</sub> )	44.90	51.50	75.80	72.00	79.50	102.90	110.85	Wp
Short-circuit current (I <sub>sc</sub> )	2.84	3.30	4.58	4.60	4.96	6.50	6.72	A
Open-circuit voltage (U <sub>oc</sub> )	21.50	21.50	21.55	21.50	21.37	21.50	21.39	V
Voltage (U <sub>mpp</sub> )	17.00	17.00	17.83	17.00	17.05	17.00	17.51	V
Current (I <sub>mpp</sub> )	4.2	3.0	4.3	4.2	4.8	6.0	6.3	A

### Dimensions and weight

Dimensions (LxW)	1330x350	775x680	1237x557	1070x680	1237x557	1500x680	1500x680	mm
Weight	6.3	6.6	7.9	8.6	7.9	12.1	12.1	kg
Cell dimensions	103x103	156x78	125x125	156x109	125x125	156x156	156x156	mm

### Thermal properties

TK P <sub>mpp</sub>	-0.45	%/K
TK U <sub>oc</sub>	-0.36	%/K
TK I <sub>sc</sub>	0.03	%/K
NOCT	46 ± 2	°C

### Other technical data

System voltage	12	V
Reverse current carrying capacity I <sub>R</sub>	12	A
Measuring accuracy P <sub>mpp</sub> at STC	± 5	%
Frame thickness	40	mm
Glass thickness	3.2	mm

### Material used

Number of cells	36
Front	tempered solar glass
Junction box	IP65 with spring-type terminals

As of 05/2013. Errors and omissions excepted. Technical changes reserved.

Your CENTROSOLAR Partner: