

SOLARA Select S861TI ■ S870TI ■ S880TI ■ S890TI

The SOLARA S-Class

Extra output thanks to
 nano-structured anti-reflective solar glass
 Ask for special expertise!



Appearance and detailed specification is subject to change without notice

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Solar Energy for Professionals

The SOLARA S-Class modules are designed and produced in our factory in Wismar. They are first choice for professional applications where highest reliability and performance is required. Rely on premium quality made in Germany, saving the natural resources that belong to all of us. Become your own eco-friendly electricity producer and enjoy the freedom of maximum safety for your investment.

Power Without Restriction

The SOLARA S-Class is being produced in order to fulfill the highest claims and to endure even extreme climatic conditions: ice, hail, snow, storm, high humidity and intense thermal fluctuation. Neither prolonged heat nor extreme coldness can harm the SOLARA S-Class. It is always reliably using the optimum of the available light to gain the highest yield possible.

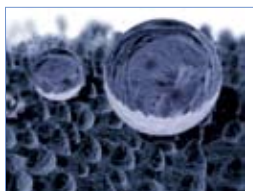
Simply the Best

The SOLARA S-Class modules consist of high-performance solar cells. They perfectly transform light to power, even in case of diffuse irradiation and in months with less sunshine.

Thanks to the anti-reflective solar glass the SOLARA S-Class harvests more kWh for you – especially when the sun is low and the sky is cloudy. It's that simple when you stick to the best.

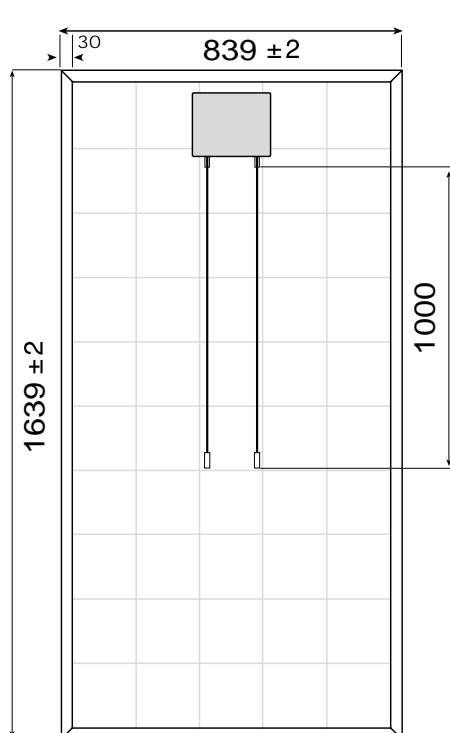
Quality Pays Off

We make your quality standards our own. Therefore each and every SOLARA module is inspected and measured individually. Each S-Class module only gets its unchangeable serial number laminated behind the glass until all test criteria are positively fulfilled. We document this by granting an efficiency **guarantee of 26 years** to you. Thus we secure your money from the beginning!

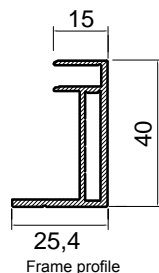


SOLARA Select S861TI ■ S870TI ■ S880TI ■ S890TI**'Made in Germany' makes the difference**

- More than 10 years of experience in solar module production
- Anti-reflective coating for increased output
- Unchangeable serial number (laminated onto the front side)
- Tested and qualified by VDE according to IEC 61215, Ed. 2 and safety class II
- CE compliant
- Individual measurement of every single module after production
- Thermally pre-stressed solar glass guarantees highest translucence and stability



Protection class II



Frame profile



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Technical Data

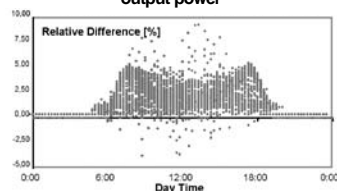
	S861TI S861TI/S	S870TI S870TI/S	S880TI S880TI/S	S890TI S890TI/S
Nominal power (P _{mpp}) (STC)	161 Wp	170 Wp	180 Wp	190 Wp
Solar cell	all polycrystalline, but S8xxTI/S modules with uniform optical appearance due to acidic treatment of cells			
Cell dimension	156 x 156 mm			
Number of cells	50 pcs			
Cell efficiency	13.5%	14.1%	14.8%	15.6%
Filling factor*	73.75 FF	76.52 FF	77.75 FF	78.06 FF
Minimum power P _{min}	156.17 Wp	164.90 Wp	174.60 Wp	184.30 Wp
Rated Voltage U _{mpp}	24.40 V	24.70 V	24.90 V	24.90 V
Open circuit voltage U _{oc}	29.70 V	29.82 V	29.95 V	30.35 V
Rated current I _{mpp}	6.60 A	6.88 A	7.32 A	7.63 A
Short circuit current I _{sc}	7.35 A	7.45 A	7.73 A	8.02 A
Temperature coefficients ΔP _{mpp}	-0.43 %/K	-0.43 %/K	-0.43 %/K	-0.43 %/K
Temperature coefficients P _{mpp}	-0.69 W/K	-0.73 W/K	-0.77 W/K	-0.82 W/K
Temperature coefficients ΔU _{oc}	-0.32 %/K	-0.32 %/K	-0.32 %/K	-0.32 %/K
Temperature coefficients U _{oc}	-0.095 V/K	-0.095 V/K	-0.096 V/K	-0.099 V/K
Temperature coefficients ΔI _{sc}	0.03 %/K	0.03 %/K	0.03 %/K	0.03 %/K
Temperature coefficients I _{sc}	2.21 mA/K	2.24 mA/K	2.32 mA/K	2.47 mA/K
Power tolerance	± 3%			
Other electrical tolerances	± 10%			
NOCT (normal operating cell temperature)	46 °C			
Operating temperature	-40...+85 °C			
Product Guarantee**	5 years			
Performance guarantee**	10 years 90%, 26 years 80%			
Length x height x width	1639 x 40 x 839 mm			
Module surface	1.38 m ²			
Module efficiency***	11.95%	12.48%	13.10%	13.80%
Peak power per unit area	117.08 Wp/m ²	123.63 Wp/m ²	130.90 Wp/m ²	138.17 Wp/m ²
Solar glass	3.2 mm with anti-reflective treatment			
Junction box	Spelsberg, easy to maintain			
Bypass diodes (Schottky)	3 pcs, 10 A			
Solar cable	Huber + Suhner, 'Radox', electron-beam cross-linked insulation and coating			
Cable diameter	4 mm			
Cable length	100 cm			
Cable connectors	Huber + Suhner, 'Twist-lock', for up to 55 A			
Maximum system voltage	1,000 V			
Frame ****	Hollow aluminium alloy profiles, screw-free			
Weight	16.3 kg ± 0.5 kg			

* Filling factor to be identified only according to other parameters and their imminent tolerances.

** According to the CENTROSOLAR Guarantee conditions (incl. Product and Performance Guarantee)

*** More free space between solar cells and frame avoids untimely shadowing due to contamination. Additionally the nano-structured solar glass reduces the need for cleaning to a minimum. Hence a lower module efficiency is preferred to higher yields over time!

**** Available also as unframed laminate.

Distribution of relative momentary output power

The M-curve means more - due to anti-reflective solar glass.

IV-curves at T_{amb} 25 °C