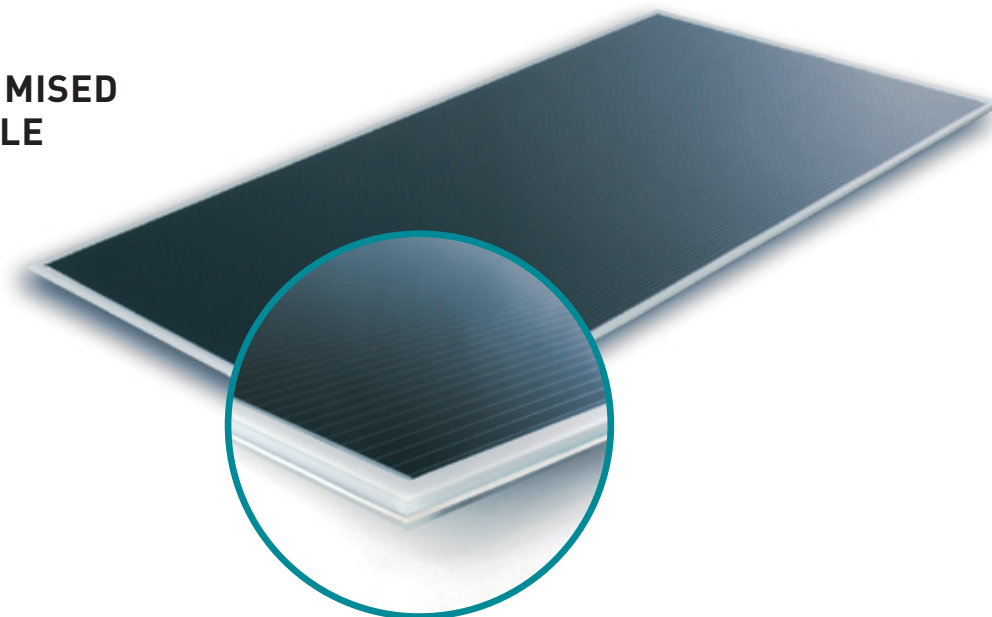


THE COST-OPTIMISED QUALITY MODULE



Robust · Hardened, 5 millimetre-thick front panel

Easy installation · Compact module format enables easy mounting by a single installer
· Packed with cardboard sleeves to protect edges during installation

High yields · Positive output tolerance (+8/-2 per cent)
· Frameless surface ensures optimal self-cleaning
· Excellent temperature coefficient ensures high yields at hot locations

Quality made in Germany

Sulfurcell's production accords with the high quality standards of the semiconductor industry and it manufactures its CIS-based thin-film solar modules solely in Germany. The uniformly black glass surfaces provide visible proof of the quality and make the modules amongst the most attractive on the market. Sulfurcell products are fully mature: they were already launched on the market in 2005 and have been continually improved since then. The modules are IEC-certified and more than meet this standard: for example, they maintain their performance capability not only when they are aged for the standard 1 000 hours at 85 °C and 85% humidity but also after 2 000 hours. This durability is reflected in the comprehensive warranty: Sulfurcell not only grants its end customers an independent product warranty lasting 10 years for all modules but also grants an output warranty for 25 years***.

Laminate modules are particularly suitable for:

- Large-scale commercial and agricultural roofs
- Gently sloping roofs and flat roofs
- Or as raw modules for further processing to become construction elements in roof and facade systems

About Sulfurcell Solartechnik GmbH

The Sulfurcell technology company is one of the leading manufacturers of CIS-based thin-film solar modules and is the exclusive partner for the Helmholtz Centre Berlin, Europe's largest research facility for thin-film photovoltaics. Its shareholders and owners include Intel Capital, Vattenfall Europe and Gaz de France Suez.



Module	SCG57-HV-L	SCG60-HV-L	SCG62-HV-L	SCG65-HV-L
Electrical Characteristics at 1000 W/m², 25 °C, AM1.5				
Rated power**	57.5 W	60 W	62.5 W	65 W
Tolerance	+8/-2%	+8/-2%	+8/-2%	+8/-2%
Module efficiency	7.1 %	7.4 %	7.7 %	8.0 %
Voltage at V _{mpp} *	39.7 V	40.3 V	41.5 V	42.2 V
Current at I _{mpp} *	1.45 A	1.49 A	1.51 A	1.54 A
Open-circuit voltage* V _{oc}	51.4 V	52.1 V	53.7 V	53.9 V
Short-circuit current* I _{sc}	1.71 A	1.74 A	1.76 A	1.78 A
Max. system voltage	1000 V	1000 V	1000 V	1000 V
Reverse current load	5 A	5 A	5 A	5 A
Electrical Characteristics at 800 W/m² and NOCT				
Voltage at V _{mpp} *	36.7 V	36.7 V	36.9 V	37.3 V
Current at I _{mpp} *	1.20 A	1.22 A	1.24 A	1.26 A
Open-circuit voltage* V _{oc}	47.1 V	47.7 V	47.8 V	48.5 V
Short-circuit current* I _{sc}	1.41 A	1.42 A	1.43 A	1.44 A
Power at 800 W/m ² and NOCT	44.1 W	44.7 W	45.9 W	47.0 W
Electrical Characteristics at 200 W/m², 25 °C, AM1.5				
Absolute efficiency reduction (from 1000 W/m ² to 200 W/m ²)	0.8%	0.8%	0.8%	0.8%

Notes

* Tolerance of the electrical parameters ± 10%
 ** Determined under standard test conditions: 25 °C, 1000 W/m², AM1.5
 The modules are not suitable for mobile and maritime applications.
 Please note that if the modules are stored in darkness for longer periods of time, they only attain their rated output once they have been exposed to sufficient solar radiation. **Please refer to our user information, which is available at www.sulfurcell.com. Since we continually optimise our solar modules, this can lead to changes in the technical data specified in the data sheet.** All data applies exclusively to modules produced from the given date.
 *** See Sulfurcell Solartechnik GmbH's independent manufacturer's warranty for end customers for SCG-type PV modules (as of July 2010). The modules are currently permitted for use in the following countries: EU Member States, Switzerland, Norway, Turkey, Liechtenstein, Israel, Lebanon, Croatia, Bosnia-Herzegovina, Serbia. (09/2010)

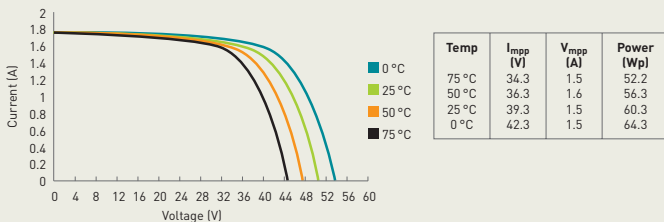


- Qualified, IEC EN 61646
- Safety tested, IEC EN 61730
- Periodic Inspection
- Salt corrosion resistance tested, IEC EN 61701
- Ammoniac-tested in accordance to DIN 50916:1985

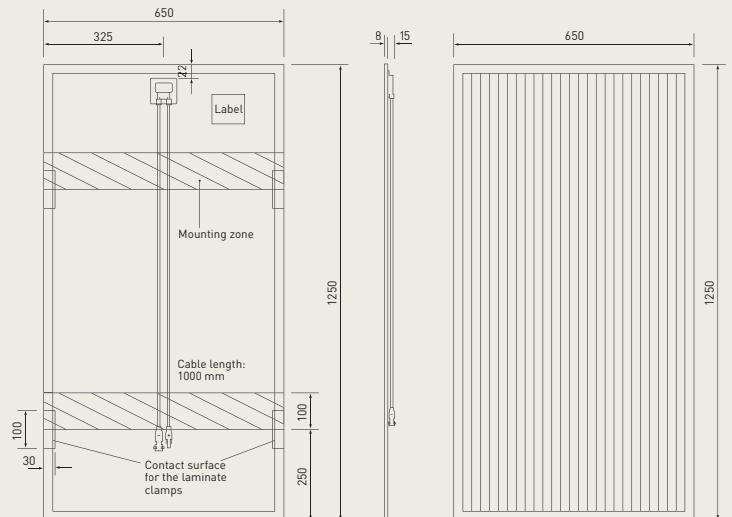
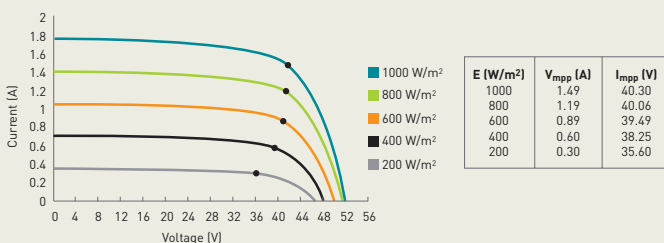
Thermal Parameters	
NOCT	47 °C
Temperature coefficient of (I _{sc}) in %/K	0.04%
Temperature coefficient of (V _{oc}) in %/K	-0.26%
Temperature coefficient of (P _{max}) in %/K	-0.30%
Operating Conditions	
Temperature range	-40 °C/+85 °C
Static load	2400 Pa/245 kg/m ²
Max. torsion	1.2°
Hail test	passed

Mechanical Characteristics			
Length	1250 mm	Connector	Y-SOL 4
Width	650 mm	IP Code	65
Thickness incl. junction box	23 mm	Cell type	CIS thin-film technology
Glass laminate depth	8 mm	Cover pane	5 mm tempered glass
Weight	14.7 kg	Rear pane	2 mm float glass
Output cables length (mm)	(+) 1000; (-) 1000	Encapsulation	EVA
Bypass diode	1 x Diotec BY550-1000	Certification	IEC EN 61646, IEC EN 61730, IEC EN 61701, Protection Class II

Dependence of power output and temperature **Module Type SCG60-HV-L**



Dependence of power output and irradiance **Module Type SCG60-HV-L**



SULFURCELL Solartechnik GmbH
 Groß-Berliner Damm 149
 D-12487 Berlin

Tel.: +49 (0)30 46 77 77 – 0
 Fax: +49 (0)30 46 77 77 – 400

info@sulfurcell.de
 www.sulfurcell.com

Your local Sulfurcell partner: