# SOLAR POWER PANELS



### **SUNCELL PLUS**

COMMERCIAL SOLAR PANELS SOLAHART450C1



The new high-performance Solahart SunCell-Plus panel is not only great value, it's also custom-designed and built to Solahart's strict quality specifications.

With a high efficiency rating of 20.7%, proven durability and easy-to-install design, Solahart SunCell-Plus is the ideal solution for commercial applications.

Reliable silicone connections ensure excellent stability and durability.

Other features include genuine Stäubli MC4 EVO2 connectors to maintain a reliable connection and a sealed junction box that offers protection from water and corrosion.

The 15-Year Solahart Product Warranty provides ultimate confidence and peace of mind.

#### How you benefit:



### DURABLE DESIGN

Blending state of the art technology and quality construction for excellent performance under real-world conditions



#### **HIGH SOLAR YIELD**

Innovative half-cell technology with excellent power efficiency that results in more energy production per square metre.



High energy produced per panel means you pay less for electricity generated.



Cost-effective panel solution for a high return on your investment.



15-Year Solahart Product Warranty for peace of mind, plus, 25-Year Manufacturer's Performance Guarantee.\*

## **TECHNICAL DATA**



Model		SOLAHART450C1	
Electrical Data			
Minimum performance at sta	indard test conditions, STC <sup>(1)</sup> (Power Tolerance +5	W / -0 W)	
Power at MPP <sup>(2)</sup> - P <sub>MPP</sub>		450 Wp	
Short circuit current - I <sub>sc</sub>		11.37 A	
Open circuit voltage - V <sub>oc</sub>		49.05 V	
Current at MPP - I <sub>MPP</sub>		10.89 A	
Voltage at MPP - V <sub>MPP</sub>		41.32 V	
Efficiency <sup>(1)</sup> - η		20.7%	
Minimum performance at no	rmal operating conditions, NMOT <sup>(3)</sup>		
Power at MPP - P <sub>MPP</sub>		334.5 Wp	
Short circuit current - I <sub>sc</sub>		9.16 A	
Open circuit voltage - V <sub>oc</sub>		45.94 V	
Current at MPP - I <sub>MPP</sub>		8.72 A	
Voltage at MPP - V <sub>MPP</sub>		38.37 V	
Other Information			
Part Number		SOLAHART450C1	
Solahart Product Warranty*		15 years	
Manufacturer's Performance Guarantee*		25 years	
Country of Manufacture		China	
Mechanical Data		Manufacturer's Performance Guarantee	
Dimensions (H x W x D)	2094 x 1038 x 35 mm (including frame)		
Weight	23.5 Kg	100.00% ] 15-year Warranty for Materials and Processing	
Glass thickness	3.2 mm	98.00% 25-year Warranty for Extra Linear Power Output (1 <sup>st</sup> year ≤ 2.0%, 2 <sup>st</sup> ~25 <sup>st</sup> years ≤ 0.55% / year)	
Backsheet	White	95.00%-	
Frame	Silver Anodised Aluminium	90.00%-	
Cell	6 x 24 monocrystalline solar half-cells	At least 98% of nominal power	
Number of diodes	3	degradation per year. At least 84.8% of	
Junction box	Protection class IP68, with bypass diodes	nominal power up to 25 years.	
Cable	4 mm <sup>2</sup> solar cable; (+) 1300 mm, (-) 1300 mm	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	
Connector	Stäubli MC4 EVO2 connectors (PV-KST4 EVO 2 & PV-KBT4 EVO 2)	All data within measurement tolerances.	
Temperature Coefficie		Dimensions - Measurements in mm	
Normal module operating temp (NMOT)	41±2°C	8 46 Sizem AA Grandge New A	
Temp coefficient of $P_{MPP} - \gamma$	-0.35%/°C	989mm 11mm	
Temp coefficient of $V_{oc}$ - $\beta$	-0.28%/°C	B dem x Mem	
Temp coefficient of Isc - α	+0.035%/°C		
Qualifications and Cer			
	; IEC 61730: 2016, Application class II.		
Properties for System Design		2094mm	
Properti <u>es for System</u>			
	1500 V		
Max system voltage - Vsys	1500 V 20 A	20mm 9mm 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Max system voltage - Vsys Max reverse current - Ir	20 A		
Properties for System Max system voltage - Vsys Max reverse current - IR Max design load, Push/Pull Max test load, Push/Pull		16-15mm x 8.5mm Danage holes	

Specifications and designs included in this data sheet are subject to change without notice.

(1)1000 W/m<sup>2</sup>, 25±2°C, AM 1.5 G. <sup>(2)</sup>Measurement tolerances PMIPP ±3 %; Isc, Voc ±5 % at STC. <sup>(3)</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 G. <sup>#</sup> Typical values, actual values may differ. \*For full details see Solahart Owner's Guide & Installation Instructions.