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.

Every Solahart system is backed by a trusted Solahart Australia Warranty that offers the advantage of local on-the-ground support to deliver true peace of mind. With almost 70 years of solar experience and over 60 Dealerships across Australia, we're here for the long haul.

How you benefit:





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



HIGH PERFORMANCE

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



VALUE FOR MONEY

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



SOLAHART WARRANTY

15-Year Solahart Product Warranty for peace of mind, plus, 25-Year Performance Guarantee for long term returns.*

TECHNICAL DATA



Model		SOLAHART450C1
Electrical Data		
Minimum performance at sta	ndard test conditions, STC ⁽¹⁾ (Power Tolerance +5	W / -0 W)
Power at MPP ⁽²⁾ - P _{MPP}		450 Wp
Short circuit current - I _{sc}		11.37 A
Open circuit voltage - Voc		49.05 V
Current at MPP - I _{MPP}		10.89 A
Voltage at MPP - V _{MPD}		41.32 V
Efficiency ⁽¹⁾ - η		20.7%
	NAOT(I)	20.7%
	rmal operating conditions, NMOT ⁽³⁾	
Power at MPP - P _{MPP}		334.5 Wp
Short circuit current - I _{sc}		9.16 A
Open circuit voltage - V _{oc}		45.94 V
Current at MPP - I _{MPP}		8.72 A
Voltage at MPP - V_{MPP}		38.37 V
Other Information		
Part Number		SOLAHART450C1
Solahart Product Warranty*		15 years
Performance Guarantee*		25 years
Country of Manufacture		China
Mechanical Data		Performance Guarantee
Dimensions (H x W x D)	2094 x 1038 x 35 mm (including frame)	
Weight	23.5 Kg	100.00% 7 15-year Warranty for Materials and Processing
Glass thickness	3.2 mm	98.00% 25-year Warranty for Extra Linear Power Output
Backsheet	White	(1 st year ≤ 2.0%, 2 st -25 st years ≤ 0.55% / year)
Frame	Silver Anodised Aluminium	
Cell	6 x 24 monocrystalline solar half-cells	90.00%- At least 98% of nominal power
	•	during the first year. Thereafter max 0.6% degradation per year. At least 84.8% of
Number of diodes	3	nominal power up to 25 years.
Junction box	Protection class IP68, with bypass diodes	80.00% 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
Cable	4 mm² solar cable; (+) 1300 mm, (-) 1300 mm	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 Coefficients		Dimensions - Measurements in mm
Normal module operating temp (NMOT)	41±2°C	6.03.5cm
Temp coefficient of $P_{\mbox{\tiny MPP}}$ - γ	-0.35%/°C	B-dem x Herm Nourting Note
Temp coefficient of V_{oc} - β	-0.28%/°C	
Temp coefficient of I_{sc} - α	+0.035%/°C	L S
Qualifications and Certificates		
IEC 61215: 2016; IEC 61730: 2016, Application class II.		Maria
Properties for System Design		4-7mm x librors I
Max system voltage - Vsys	1500 V	20 mm 9 mm
Max reverse current - IR	20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Max design load, Push/Pull	3600 / 1600 Pa	
Max test load, Push/Pull	5400 / 2400 Pa	16-3.5mm x 8.5mm Charloge Total
Fire rating based on IEC/UL	Class C / TYPE 4	TilF

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

⁽¹⁾¹⁰⁰⁰ W/m², 25±2°C, AM 1.5 G. (2)Measurement tolerances PMPP ±3 %; Isc, Voc ±5 % at STC. (3)800 W/m², NMOT, spectrum AM 1.5 G. # Typical values, actual values may differ.

^{*15-}year Solahart Product Warranty covers certain defects with the Solahart SunCell solar panels. Please refer to the 'Solahart PV Systems Owner's Guide' for full details, available on Solahart's website www.solahart.com.au. 25-year Performance Guarantee is provided by the manufacturer of the Solahart SunCell solar panels and guarantees the maximum reduction in power output performance of the panels over a 25-year period. Neither the Solahart Product Warranty nor the Performance Guarantee are intended to exclude, restrict or modify your rights under the Australian Consumer Law.