

SUNCELL PLUS COMMERCIAL SOLAR PANELS

SOLAHART450H2



The new high-performance Solahart SunCell-Plus panel is not only great value but it's also custom-designed and built to Solahart's strict quality specifications. Offering positive tolerance of up to 5W ensures that each SunCell-Plus panel will have a rated maximum power on or above 450W at Standard Test Conditions (STC)⁽¹⁾.

With a high-efficiency rating of 20.8%, proven durability, an attractive black frame and an easy-to-install design, Solahart SunCell-Plus is the ideal solution for both commercial and residential 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 70 years of solar experience and over 60 Dealerships across Australia, we're here for the long haul.

How you benefit:



RELIABLE 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 PERFORMANCE

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



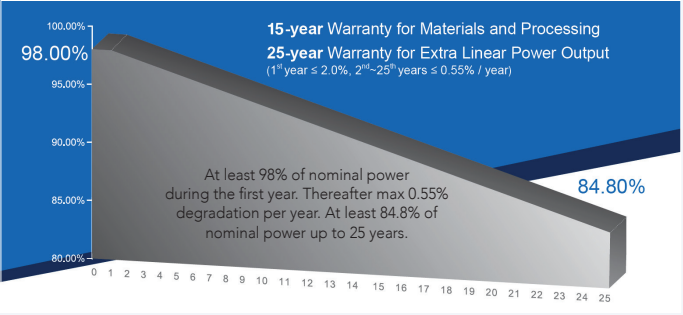
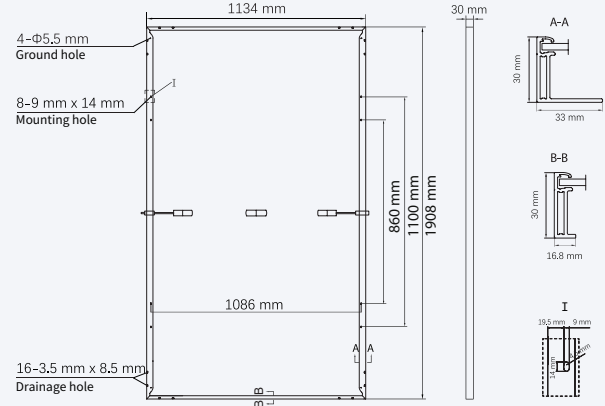
VALUE FOR MONEY

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.*

Model		SOLAHART450H2	
Electrical Data			
Minimum performance at standard test conditions, STC ⁽¹⁾ (Power Tolerance +5 W / -0 W)			
Power at MPP ⁽²⁾ - P _{MPP}			450 Wp
Short circuit current - I _{sc}			13.71 A
Open circuit voltage - V _{oc}			41.45 V
Current at MPP - I _{MPP}			12.92 A
Voltage at MPP - V _{MPP}			34.83 V
Efficiency ⁽¹⁾ - η			20.8%
Minimum performance at normal operating conditions, NMOT ⁽³⁾			
Power at MPP - P _{MPP}			336.3 Wp
Short circuit current - I _{sc}			11.12 A
Open circuit voltage - V _{oc}			39.17 V
Current at MPP - I _{MPP}			10.36 A
Voltage at MPP - V _{MPP}			32.46 V
Other Information			
Part Number			SOLAHART450H2
Solahart Product Warranty*			15 years
Performance Guarantee*			25 years
Country of Manufacture			China
Mechanical Data		Performance Guarantee	
Dimensions (H x W x D)	1908 x 1134 x 30 mm (including frame)		
Weight	23.9 Kg		
Glass thickness	3.2 mm		
Backsheet	White		
Frame	Black Anodised Aluminium		
Cell	6 x 20 monocrystalline solar half-cells		
Number of diodes	3		
Junction box	Protection class IP68, with bypass diodes		
Cable	4 mm ² solar cable; (+) 1300 mm, (-) 1300 mm		
Connector	Stäubli MC4 EVO2 connectors (PV-KST4 EVO 2 & PV-KBT4 EVO 2)		
Temperature Coefficients		Dimensions - Measurements in mm	
Normal module operating temp (NMOT)	41±2°C		
Temp coefficient of P _{MPP} - γ	-0.34%/°C		
Temp coefficient of V _{oc} - β	-0.25%/°C		
Temp coefficient of I _{sc} - α	+0.04%/°C		
Qualifications and Certificates			
IEC 61215: 2016; IEC 61730: 2016, Application class II.			
Properties for System Design			
Max system voltage - V _{sys}	1500 V		
Max reverse current - I _r	25 A		
Max design load, Push/Pull	3600 / 1600 Pa		
Max test load, Push/Pull	5400 / 2400 Pa		
Fire rating based on IEC/UL	Class C / TYPE 4		
 <p>All data within measurement tolerances.</p>			
			

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 P_{MPP} ±3%; I_{sc}, V_{oc} ±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 Plus 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 Plus 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.

Solahart Australia 1300 769 475 | solahart.com.au

Reorder code: SHDS/PV_SH450_SUNCNP

ir5092 SunCell_Plus_SOLAHART450H2_July_2023