SOLAR POWER SYSTEMS



SUNCELL PLUS

COMMERCIAL SOLAR PANELS SOLAHART455H2





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 455W at Standard Test Conditions (STC)⁽¹⁾.

With a high-efficiency rating of 21%, 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:



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 Performance Guarantee for long term returns.*

TECHNICAL DATA



Model		SOLAHART455H2
Electrical Data		
Minimum performance at st	andard test conditions, STC ⁽¹⁾ (Power Tolerance +5	₩ / -0 W)
Power at MPP ⁽²⁾ - P _{MPP}		455 Wp
Short circuit current - I _{sc}		13.81 A
Open circuit voltage - V _{oc}		41.65 V
		13.00 A
Voltage at MPP - V _{MPP}		35.00 V
Efficiency ⁽¹⁾ - η		21%
Minimum performance at no	ormal operating conditions, NMOT ⁽³⁾	
Power at MPP - P _{MPP}		340 Wp
Short circuit current - I _{sc}		11.2 A
Open circuit voltage - V _{oc}		39.36 V
Current at MPP - I _{MPP}		10.42 A
Voltage at MPP - V _{MPP}		32.62 V
Other Information		
Part Number		SOLAHART455H2
Solahart Product Warranty*		
Performance Guarantee*		15 years
		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	15-year Warranty for Materials and Processing
Glass thickness	3.2 mm	98.00% 25-year Warranty for Extra Linear Power Output (1 st year ≤ 2.0%, 2 st -25 st years ≤ 0.55% / year)
Backsheet	White	
Frame	Black Anodised Aluminium	90.00%-
Cell	6 x 20 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 ² 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 Coefficients		Dimensions - Measurements in mm
Normal module operating	41±2°C	1134 mm 30 mm
temp (NMOT)	0.7.40//0.0	4-Ф5.5 mm Ground hole
Temp coefficient of $P_{MPP} - \gamma$	-0.34%/°C	
Temp coefficient of V_{oc} - β	-0.25%/°C	8-9 mm x 14 mm K Mounting hole 33 mm
Temp coefficient of Isc - α	+0.04%/°C	B-B
Qualifications and Certificates		
IEC 61215: 2016; IEC 61730: 2016, Application class II.		
Properties for System	Design	16.8 mm
Max system voltage - Vsys	1500 V	1086 mm
Max reverse current - IR	25 A	1086 mm II 1086 mm II 1086 mm III 1086 mm III 1086 mm III 1086 mm III
Max design load, Push/Pull	3600 / 1600 Pa	16-3.5 mm x 8.5 mm
Max test load, Push/Pull Fire rating based on IEC/UL	5400 / 2400 Pa Class C / TYPE 4	Drainage hole
cire rauno pased on IEC/UL		

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 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.

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