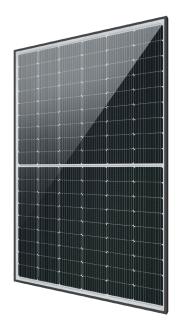
SOLAR POWER PANELS



SOLAHART SUNCELL®

N-TYPE RESIDENTIAL PANELS

SOLAHART440R2





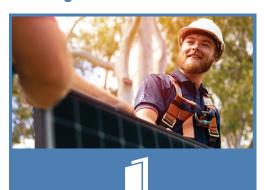
The new high-performance Solahart SunCell® panel not only offers great value, but it's also custom-designed and built to Solahart's strict quality specifications.

With an attractive black frame design, this panel is easy to install and maintain, and is well suited to Australian roof designs. Solahart SunCell® also ticks all the boxes on durability, it has passed endurance testing of up to three times more cycles than the international standard, making it an ideal solution in Australia's harsh conditions.

The state-of-the-art n-type, monocrystalline half-cell and super multi-busbar design offers excellent performance under Australian conditions, on hot summer days, and even in low-light environments. The exceptional 30 year Performance Warranty assures at least 89.4% of nominal power at 25 years and at least 87.4% at 30 years.

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 more than 70 years of solar experience and over 60 Dealerships across Australia, we're here for the long haul.

How you benefit:



DURABLE DESIGN

Latest n-type technology and quality construction for excellent performance in Australian 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

25-Year Solahart Product Warranty for peace of mind, plus, 30-Year Performance Guarantee for long term returns.*

TECHNICAL DATA



Model		SOLAHART440R2	
Electrical Data			
Minimum performance at Sta	andard Test Conditions (STC)(1) (Power Sorting +/-	5 W, Power Tolerance: +/-3%)	
Power at MPP ⁽²⁾ - P _{MPP}		440 V	Vp
Short circuit current ⁽²⁾ - I _{sc}		14.30 A	
Open circuit voltage ⁽²⁾ - V _{oc}		38.80 V	
Current at MPP# - IMPP		13.49 A	
Voltage at MPP# - V _{MPP}		32.61 A	
		22.5%	
Efficiency ⁽¹⁾ - η		22.5	%
	rmal operating conditions, NMOT ⁽³⁾		
Power at MPP - PMPP		330.9 Wp	
Short circuit current# - Isc		11.54 A	
Open circuit voltage# - Voc		36.85 V	
Current at MPP# - I _{MPP}		10.78 A	
Voltage at MPP# - V _{MPP}		30.70 V	
Other Information			
Part Number		SOLAHART440R2	
Solahart Product Warranty*		25 years	
Performance Guarantee*		30 years	
Country of manufacture		China	
Mechanical Data		Performance Guarantee	
Dimensions (H x W x D)	1722 x 1134 x 30 mm (including frame)	remormance Guarantee	
		100% 99%	
Weight	21.3 Kg	97.4% α	■ Solahart SunCell n-type ■ Typical p-type
Glass thickness	3.2 mm	95.4%	93.4%
Backsheet	White	98% 95.8%	91.4%
Frame	Black	90%	89.4%
Cell	6 x 18 monocrystalline solar half-cells	At least 99% of nominal power during the	90.3%
Number of diodes	3	first year. Thereafter max 0.4% degradation	n Gio
Junction box	Protection class IP68, with bypass diodes	per year. At least 89.4% of nominal power to 25 years and 87.4% up to 30 years.	up
Cable	4 mm² solar cable; (+) 1200 mm, (-) 1200 mm	80% 0 1 5 10	15 20 25 EARS
Connector	Stäubli MC4 EVO2 connectors (PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy)	All data within measurement tolerances.	
Temperature Coefficie	nts	Dimensions - Measurements in mn	n
Normal module operating temp (NMOT)	41±2°C	1134 mm 8-Ф5.5 mm	30 mm A-A
Temp coefficient of P _{MPP} - γ	-0.29%/°C	Ground hole	
Temp coefficient of V _{oc} - β	-0.25%/°C	9.0 mm v 14 mm	30 10
Temp coefficient of I _{sc} - α	+0.043%/°C	8-9 mm x 14 mm Mounting hole	
Qualifications and Cer	tificates		33 mm
	; IEC 61730: 2016, Application class II.		1422 mm 1722 mm 1722 mm
Properties for System			I 1722
Max system voltage - Vsys	1500 V		19.5 mm 9 mm
Max reverse current - IR	25 A		
Max design load, Push/Pull	3600 / 1600 Pa	1086 mm	E Abim
Max test load, Push/Pull	5400 / 2400 Pa	16-3.5 mm x 8.5 mm Drainage hole	

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

 $^{^{(1)}1000 \}text{ W/m}^2, 25\pm2^{\circ}\text{C, AM 1.5 G.} \\ ^{(2)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}800 \text{ W/m}^2, \text{NMOT, spectrum AM 1.5 G.} \\ ^{(2)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}800 \text{ W/m}^2, \text{NMOT, spectrum AM 1.5 G.} \\ ^{(2)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}800 \text{ W/m}^2, \text{NMOT, spectrum AM 1.5 G.} \\ ^{(2)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}800 \text{ W/m}^2, \text{NMOT, spectrum AM 1.5 G.} \\ ^{(2)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}800 \text{ W/m}^2, \text{NMOT, spectrum AM 1.5 G.} \\ ^{(3)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \% at STC.} \\ ^{(3)}\text{Measurement tolerances P}_{\text{MPP}} \pm3 \text{ \%; Isc, Voc} \pm5 \text{ \%; Isc,$

^{* 25-}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. 30-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 30-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.