

# SOLAHART SILHOUETTE SOLAR PANEL

SOLAHART390S2

The new ultimate-performance Solahart Silhouette panel, with stylish all-black appearance, is the ideal solution for Australian homes thanks to its innovative and premium cell technology.

The state-of-the-art PERC monocrystalline half-cell and 12-busbar design was developed to achieve excellent performance under real conditions, even with low radiation intensity and on clear, hot summer days. The new zero-gap layout boosts panel efficiency to up to 20.8%.

The black anodised aluminium frame has been built to withstand extreme weather conditions, including high winds, and reliable silicone connections ensure excellent stability and durability. Other features include optimally positioned drainage holes to protect against frost damage, premium MC4 connecting plugs to secure a reliable connection, and a sealed junction box that offers corrosion protection and water resistance.

The exceptional 25-Year Solahart Product Warranty provides ultimate confidence and peace of mind.

## State-of-the-art half-cell technology:

For excellent performance under real conditions.

## Innovative all-weather technology:

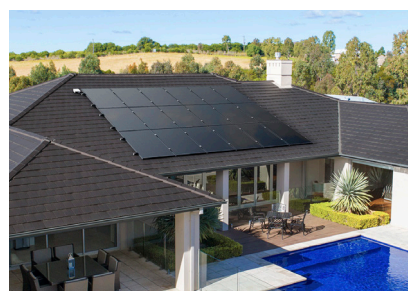
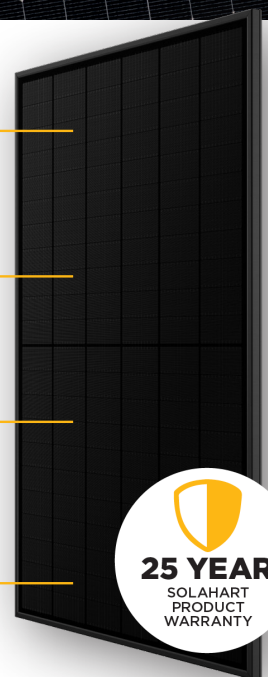
Optimal yields, whatever the weather.

## Low electricity generation costs:

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

## Stylish, efficient, and durable:

Designed in Germany, manufactured in Korea and only available through Solahart.



**PREMIUM TECHNOLOGY  
WITH A TOUCH OF  
CLASS AND A STRIKING  
BLACK FINISH**

## HOW YOU BENEFIT



### HIGH SOLAR YIELD

Innovative gapless technology with excellent low-light and temperature behaviour results in more energy production per square metre.



### HIGH PERFORMANCE

Long-term yield security with anti-LID technology, Hot-Spot Protect and Solahart Quality Auditing.



### EXTREME WEATHER RATING

High-tech aluminium alloy frame, certified for high wind loads and snow loads.



### TRUSTED WARRANTIES

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

# Technical Data

## MODEL

SOLAHART390S2

### Electrical Data

Minimum performance at standard test conditions, STC<sup>(1)</sup> (Power Tolerance +5 W / -0 W)

Power at MPP <sup>(2)</sup> - P <sub>MPP</sub>	390 W <sub>p</sub>
Short circuit current <sup>(2)</sup> - I <sub>sc</sub>	10.56 A
Open circuit voltage <sup>(2)</sup> - V <sub>oc</sub>	45.12 V
Current at MPP <sup>#</sup> - I <sub>MPP</sub>	10.16 A
Voltage at MPP <sup>#</sup> - V <sub>MPP</sub>	38.40 V
Efficiency <sup>(1)</sup> - η	≥20.6 %

Minimum performance at normal operating conditions, NMOT<sup>(3)</sup>

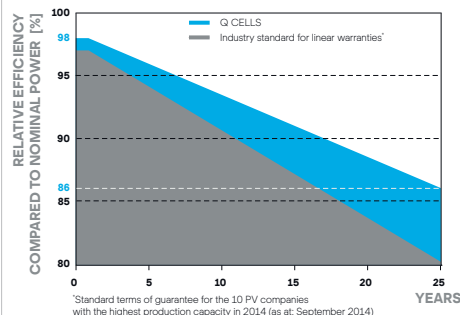
Power at MPP - P <sub>MPP</sub>	292.0 W <sub>p</sub>
Short circuit current <sup>#</sup> - I <sub>sc</sub>	8.51 A
Open circuit voltage <sup>#</sup> - V <sub>oc</sub>	42.54 V
Current at MPP <sup>#</sup> - I <sub>MPP</sub>	8.02 A
Voltage at MPP <sup>#</sup> - V <sub>MPP</sub>	36.44 V

<sup>(1)</sup>1000 W/m<sup>2</sup>, 25±2°C, AM 1.5 G. <sup>(2)</sup>Measurement tolerances P<sub>MPP</sub> ±3 %; I<sub>sc</sub>, V<sub>oc</sub> ±5 % at STC. <sup>(3)</sup>800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 G. \* Typical values, actual values may differ.

### Other information

Part Number	SOLAHART390S2
Solahart Product Warranty*	25 years
Manufacturer's Performance Guarantee*	25 years
Country of Manufacture	Korea

### Manufacturer's Performance Guarantee

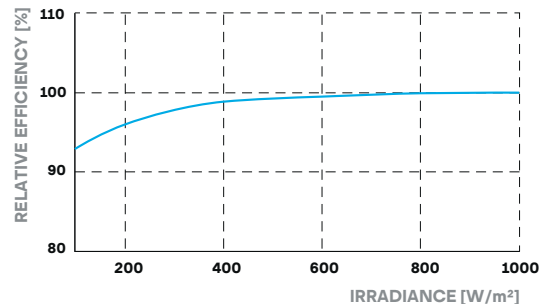


At least 98% of nominal power during the first year. Thereafter max 0.5% degradation per year.

At least 93.5% of nominal power up to 10 years.

At least 86% of nominal power up to 25 years.

All data within measurement tolerances.



Typical panel performance under low irradiance conditions in comparison to STC conditions ( 25°C, 1000 W/m<sup>2</sup>).

### Temperature Coefficients

Normal module operating temperature (NMOT)	43±3 °C
Temperature coefficient of P <sub>MPP</sub> - γ	-0.35 % / °C
Temperature coefficient of V <sub>oc</sub> - β	-0.27 % / °C
Temperature coefficient of I <sub>sc</sub> - α	+0.04 % / °C

### Qualifications and Certificates

IEC 61215: 2016; IEC 61730: 2016, Application class II.

### Mechanical Data

Dimensions (H x W x D)	1840 x 1030 x 32 mm (including frame)
Weight	19.5 Kg
Front Cover	2.8 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black Anodised Aluminium
Cell	6 x 22 monocrystalline solar half-cells
Junction Box	Protection class ≥ IP67, with bypass diodes
Cable	4 mm <sup>2</sup> solar cable; (+) 1200 mm, (-) 1200 mm
Connector	Stäubli MC4 connectors (PV-KST4 & PV-KSB4), IP68

### Licence Holder and importer:

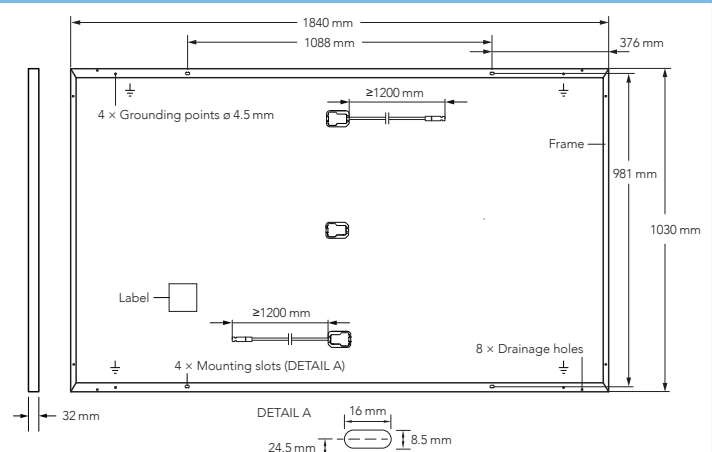
Solahart Industries Pty Ltd., 1 Alan St. Rydalmere, NSW 2116, Australia.

\*For full details see Solahart Owner's Guide & Installation Instructions.

### Properties for System Design

Permitted module temperature on continuous duty	-40°C up to +85°C
Maximum system voltage - V <sub>sys</sub>	1000 V
Maximum reverse current - I <sub>r</sub>	15 A
Maximum design load, Push / Pull	3600 / 2660 Pa
Maximum test load, Push / Pull	5400 / 4000 Pa
Safety class	II
Fire rating based on ANSI / UL 61730	C / TYPE 2

### Dimensions - Measurements in mm



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

Solahart Australia 1300 769 475 | [www.solahart.com.au](http://www.solahart.com.au)

Reorder code: SHDS/PV\_SH390\_SILH IH0113\_SOLAHART SILHOUETTE SOLAR PANEL\_390W\_Sep 2020\_CEC