

## SOLAHART SUNCELL-PLUS COMMERCIAL SOLAR PANEL

SOLAHART420C1

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

With a high efficiency of 20.8%, proven durability and easy-to-handle design, Solahart SunCell-Plus is the ideal solution for commercial installations.

Reliable silicone connections also ensure excellent stability and durability. Other features include genuine Stäubli MC4 EVO2 connectors to secure a reliable connection and a sealed junction box that offers corrosion protection and water resistance.

The 12-Year Solahart Product Warranty provides ultimate confidence and peace of mind.

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

For excellent performance under real conditions.

### High efficiency:

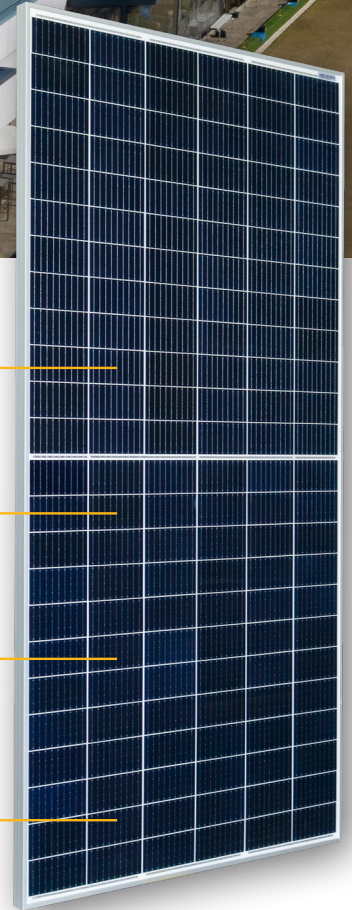
Optimal yields, more power generated per square metre.

### Low electricity generation costs:

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

### Efficient, and durable:

Manufactured to specification and only available through Solahart.



HIGH EFFICIENCY  
PANEL TECHNOLOGY  
OFFERING THE BEST  
VALUE FOR MONEY

## HOW YOU BENEFIT



### HIGH SOLAR YIELD

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



### SAFE OPERATION

Quality components ensure safety and long term performance.



### VALUE FOR MONEY

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



### TRUSTED WARRANTIES

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

# Technical Data

## MODEL SOLAHART420C1

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>	420 W <sub>p</sub>
Short circuit current - I <sub>sc</sub>	10.52 A
Open circuit voltage - V <sub>oc</sub>	50.32 V
Current at MPP - I <sub>MPP</sub>	9.92 A
Voltage at MPP - V <sub>MPP</sub>	42.35 V
Efficiency <sup>(1)</sup> - η	20.8%
Minimum performance at normal operating conditions, NMOT <sup>(3)</sup>	
Power at MPP - P <sub>MPP</sub>	312.2 W <sub>p</sub>
Short circuit current - I <sub>sc</sub>	8.48 A
Open circuit voltage - V <sub>oc</sub>	47.12 V
Current at MPP - I <sub>MPP</sub>	7.94 A
Voltage at MPP - V <sub>MPP</sub>	39.31 V

<sup>(1)</sup>1000 W/m<sup>2</sup>, 25°C, AM 1.5 G. <sup>(2)</sup>Measurement tolerances ±3 % at STC. <sup>(3)</sup>800 W/m<sup>2</sup>, 20°C, Wind speed 1m/s, AM 1.5 G.

Other Information	
Part Number	SOLAHART420C1
Solahart Product Warranty*	12 years
Manufacturer's Performance Guarantee*	25 years
Country of Manufacture	China

Mechanical Data	
Dimensions (H x W x D)	2018 x 1002 x 35 mm (including frame)
Weight	22.6 Kg
Glass thickness	3.2 mm
Backsheet	White
Frame	Silver Anodised Aluminium
Cell	6 x 24 monocrystalline solar half-cells
Number of diodes	3
Junction box	Protection class ≥ IP67, with bypass diodes
Cable	4 mm <sup>2</sup> solar cable; (+) 1200 mm, (-) 1200 mm
Connector	Stäubli MC4 EVO2 connectors (PV-KST4 EVO 2 & PV-KBT4 EVO 2)

### Manufacturer's Performance Guarantee

**12-year Warranty for Materials and Processing**  
**25-year Warranty for Extra Linear Power Output**  
 (1<sup>st</sup> year ≤ 2.0%, 2<sup>nd</sup>-25<sup>th</sup> years ≤ 0.55% / year)

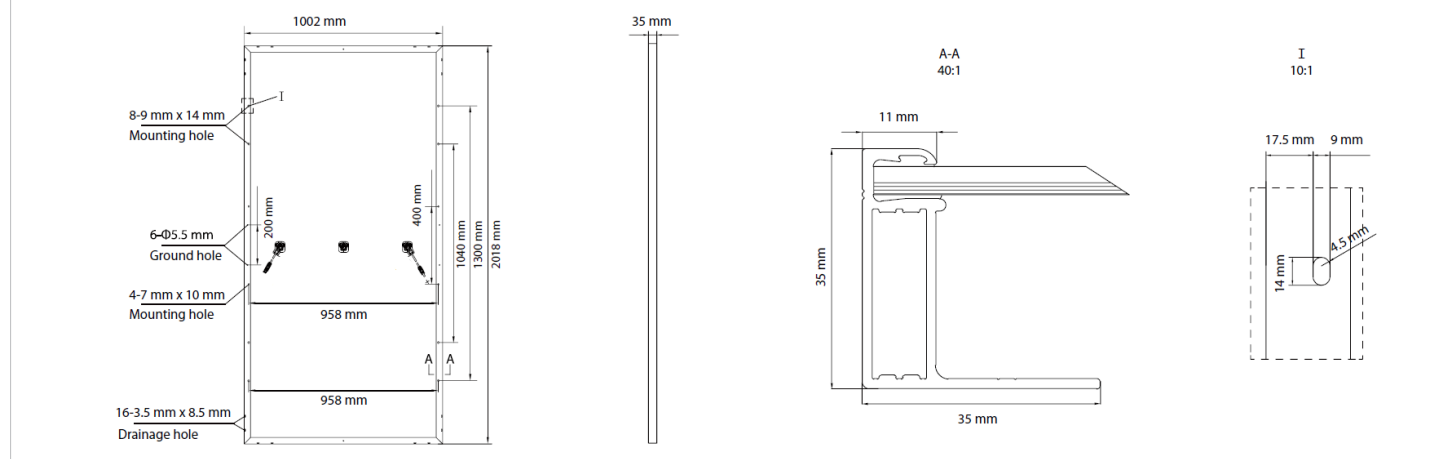
At least 98% of nominal power during the first year.  
 Thereafter max 0.6% degradation per year.  
 At least 84.8% of nominal power up to 25 years.  
 All data within measurement tolerances.

Temperature Coefficients	
Normal module operating temperature (NMOT)	44±2°C
Temperature coefficient of P <sub>MPP</sub> - γ	-0.35%/°C
Temperature coefficient of V <sub>oc</sub> - β	-0.28%/°C
Temperature coefficient of I <sub>sc</sub> - α	+0.04%/°C

Properties for System Design	
Maximum system voltage - V <sub>sys</sub>	1500 V
Maximum reverse current - I <sub>r</sub>	20 A
Maximum design load, Push / Pull	3600 / 1600 Pa
Maximum test load, Push / Pull	5400 / 2400 Pa
Safety class	II
Fire rating based on IEC / UL	Class C / TYPE 1

**Qualifications and Certificates**  
 IEC 61215: 2016; IEC 61730: 2016, Application class II.

### Dimensions - Measurements in mm



**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.

