

## SOLAHART SUNCELL-PLUS COMMERCIAL SOLAR PANEL

SOLAHART415C1

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 20.5%, 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:

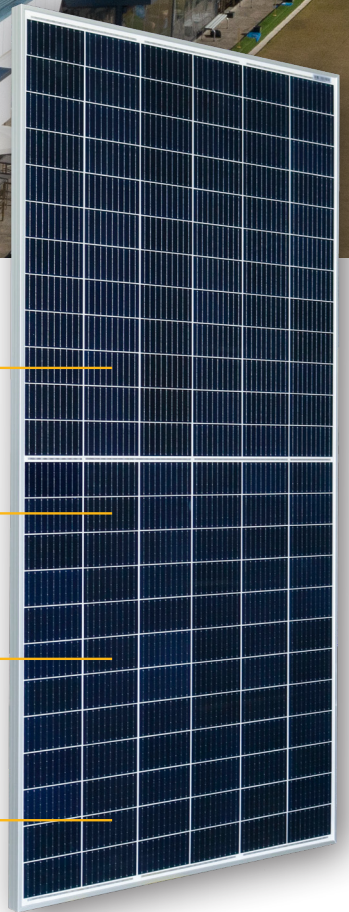
Optimal yields, more power generated per square metre.

### 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 SOLAHART415C1

| 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>  | 415 W <sub>p</sub>   |
| Short circuit current - I <sub>sc</sub>   | 10.45 A              |
| Open circuit voltage - V <sub>oc</sub>  | 50.06 V              |
| Current at MPP - I <sub>MPP</sub>   | 9.86 A               |
| Voltage at MPP - V <sub>MPP</sub>   | 42.11 V              |
| Efficiency <sup>(1)</sup> - η   | 20.5%                |
| Minimum performance at normal operating conditions, NMOT <sup>(3)</sup>                           |                      |
| Power at MPP - P <sub>MPP</sub>   | 308.5 W <sub>p</sub> |
| Short circuit current - I <sub>sc</sub>   | 8.42 A               |
| Open circuit voltage - V <sub>oc</sub>  | 46.88 V              |
| Current at MPP - I <sub>MPP</sub>   | 7.89 A               |
| Voltage at MPP - V <sub>MPP</sub>   | 39.08 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                           | SOLAHART415C1 |
| 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

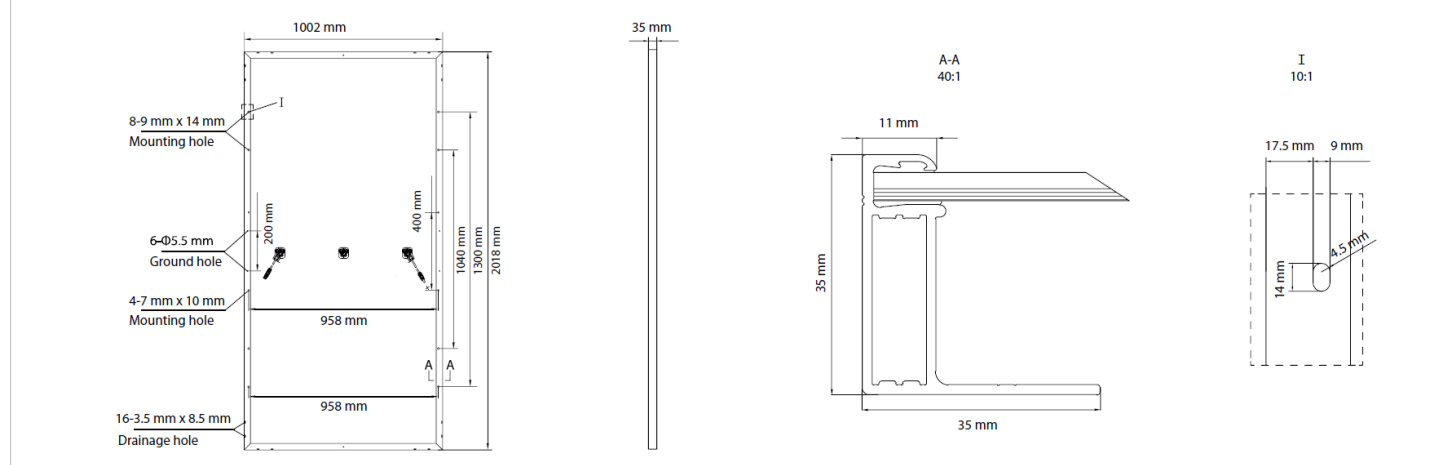
At least 98% of nominal power during the first year.  
 Thereafter max 0.6% degradation per year.  
 At least 84.8% of nominal power up to 25 years.  
 All data within measurement tolerances.

| 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.

