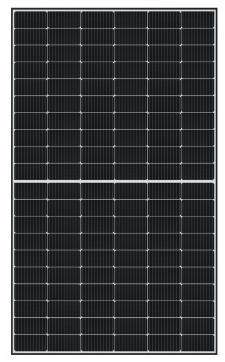
# SOLAR POWER SYSTEMS



## **SUNCELL PLUS**

N-TYPE COMMERCIAL SOLAR PANELS SOLAHART490DH2





The new high-performance n-type dual-glass 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 490W at Standard Test Conditions (STC)<sup>(1)</sup>.

With a high-efficiency rating of 22.7%, 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.

SunCell-Plus comes with industry leading 30 Year Product Warranty and 30 Year Performance Guarantee. Performance Guarantee assures at least 89.4% of nominal power at 25 years and 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:



Dual-glass design enhances fire rating and is more resilient to micro-cracks for high durability.





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



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

### **TECHNICAL DATA**



| Model   |   | SOLAHART490DH2  |
|---|---|---|
|   |   | JOLANAKIAJODNZ  |
| Electrical Data   |   |   |
|   | andard test conditions, STC $^{(1)}$ (Power Sorting O ~ +           |   |
| Power at MPP <sup>(2)</sup> - P <sub>MPP</sub>          |   | 490 Wp  |
| Short circuit current - I <sub>sc</sub>                 |   | 14.12 A   |
| Open circuit voltage - V <sub>oc</sub>                  |   | 43.76 V   |
| Current at MPP - I <sub>MPP</sub>                       |   | 13.33 A   |
| Voltage at MPP - V <sub>MPP</sub>                       |   | 36.77 V   |
| Efficiency <sup>(1)</sup> - η                           |   | 22.70%  |
| Minimum performance at no                               | rmal operating conditions, NMOT <sup>(3)</sup>                      |   |
| Power at MPP - P <sub>MPP</sub>                         |   | 368.5 Wp  |
| Short circuit current - I <sub>sc</sub>                 |   | 11.40 A   |
| Open circuit voltage - V <sub>oc</sub>                  |   | 41.56 V   |
| Current at MPP - I <sub>MPP</sub>                       |   | 11.40 A   |
| Voltage at MPP - V <sub>MPP</sub>                       |   | 34.61 V   |
| Other Information                                       |   |   |
| Part Number   |   | SOLAHART490DH2  |
| Solahart Product Warranty*                              |   | 30 years  |
| Performance Guarantee*                                  |   | 30 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 Kg   | 100% 99%  |
| Glass thickness   | 1.6 mm front and 1.6 mm back  | 97.4% Solahart SunCell-Plus n-type<br>95.4% Typical p-type                              |
| Backsheet   | White   | 93.4%   |
| Frame   | Black Anodised Aluminium  | 95% 95.8% 91.4% 89.4%   |
| Cell  | 6 x 20 n-type monocrystalline solar half-cells                      | 90.3% 90.5% 90.3%   |
| Number of diodes  | 3   | At least 99% of nominal power during the<br>first year. Thereafter max 0.4% degradation |
| Junction box  | Protection class IP68, with bypass diodes                           | per year. At least 89.4% of nominal power up<br>to 25 years and 87.4% up to 30 years.   |
| Cable   | 4 mm <sup>2</sup> solar cable; (+) 1300 mm, (-) 1300 mm             | 80%<br>0 1 5 10 15 20 25 33   |
| Cubic   |   | All data within measurement tolerances.   |
| Connector   | Stäubli MC4 EVO2 connectors<br>(PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy) | All data within measurement tolerances.   |
| Temperature Coefficients                                |   | Dimensions - Measurements in mm   |
| Normal module operating<br>temp (NMOT)                  | 41±2°C  | 4-Ф5.5 mm   |
| Temp coefficient of $P_{_{MPP}}$ - $\gamma$             | -0.29%/°C   | Ground hole   |
| Temp coefficient of Voc - $\beta$                       | -0.25%/°C   | 8-9 mm x 14 mm<br>Mounting hole   |
| Temp coefficient of $I_{sc}$ - $\alpha$                 | +0.043%/°C  |   |
| Qualifications and Certificates                         |   | ₽-8<br>  E  E  E  |
| IEC 61215: 2021; IEC 61730: 2016, Application class II. |   |   |
| Properties for System Design                            |   |   |
| Max system voltage - Vsys                               | 1500 V  |   |
| Max reverse current - IR                                | 25 A  | 1096 mm I I<br>105mm 9mm  |
| Max design load, Push/Pull                              | 3600 / 1600 Pa  | 16-3.5 mm x 8.5 mm  |
| Max test load, Push/Pull<br>Fire rating based on IEC/UL | 5400 / 2400 Pa<br>Class A   | Drainage hole   |
| rating based of file/OL                                 |   |   |

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

(1)1000 W/m<sup>2</sup>, 25±2°C, AM 1.5 G. (2)Measurement tolerances P<sub>MPP</sub> ±3.5 %; I<sub>sc</sub> ±5 %, V<sub>oc</sub> ±3.5 % at STC. (3800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 G. \* Typical values, actual values may differ.

\*30-year Solahart Product Warranty covers certain defects with the Solahart SunCell Plus solar panels. Please refer to the 'Solahart YV 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 Plus 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.

#### Solahart Industries Pty Ltd. 1300 769 475 | solahart.com.au