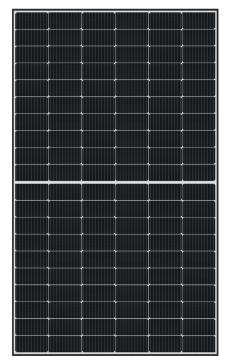
# SOLAR POWER SYSTEMS



## **SUNCELL PLUS**

N-TYPE COMMERCIAL SOLAR PANELS Solahart475dh1





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 475W at Standard Test Conditions (STC)<sup>(1)</sup>.

With a high-efficiency rating of 22%, 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**



Medal		
Model		SOLAHART475DH1
Electrical Data		
Minimum performance at sta	andard test conditions, STC <sup>(1)</sup> (Power Sorting 0 ~ +	5W, Power Tolerance: +/-3.5%)
Power at MPP <sup>(2)</sup> - P <sub>MPP</sub>		475 Wp
Short circuit current - I <sub>sc</sub>		13.80 A
Open circuit voltage - V <sub>oc</sub>		43.31 V
Current at MPP - I <sub>MPP</sub>		13.05 A
Voltage at MPP - $V_{MPP}$		36.39 V
Efficiency <sup>(t)</sup> - η		22%
Minimum performance at no	rmal operating conditions, NMOT <sup>(3)</sup>	
Power at MPP - P <sub>MPP</sub>		361 Wp
Short circuit current - I <sub>sc</sub>		11.23 A
Open circuit voltage - $V_{nc}$		41.28 V
Current at MPP - I <sub>MPP</sub>		10.50 A
Voltage at MPP - V <sub>MPP</sub>		34.37 V
Other Information		
Part Number		SOLAHART475DH1
Solahart Product Warranty*		30 years
Performance Guarantee*		30 years
		China
Country of Manufacture		
Mechanical Data	1000 1174 70 mm (including from )	Performance Guarantee
Dimensions (H x W x D)	1908 x 1134 x 30 mm (including frame)	100% 99%
Weight	23 Kg	97.4% Solahart SunCell-Plus n-type
Glass thickness	1.6 mm front and 1.6 mm back	95.4% = 1,piour p 1,po
Backsheet	White	98% 95.5% 91.4%
Frame	Black Anodised Aluminium	90% 93.1% 87.4%
Cell	6 x 20 n-type monocrystalline solar half-cells	90.3% At least 99% of nominal power during the 87.6%
Number of diodes	3	first year. Thereafter max 0.4% degradation per year. At least 89.4% of nominal power up
Junction box	Protection class IP68, with bypass diodes	to 25 years and 87.4% up to 30 years.
Cable	$4 \text{ mm}^2$ solar cable; (+) 1300 mm, (-) 1300 mm	80% 0 1 5 10 15 20 25 1 YEARS
Connector	Stäubli MC4 EVO2A connectors (PV-KST4 EVO 2A & PV-KBT4 EVO 2A)	All data within measurement tolerances.
Temperature Coefficients		Dimensions - Measurements in mm
Normal module operating 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
Temp coefficient of $I_{sc}$ - $\alpha$	+0.043%/°C	Mounting hole - 28 mm
Qualifications and Certificates		
IEC 61215: 2016; IEC 61730: 2016, Application class II.		
Properties for System Design		
Max system voltage - Vsys	1500 V	
Max reverse current - IR	25 A	1096 mm III III III III III III III III III
Max design load, Push/Pull	3600 / 1600 Pa	16.35 mm v 85 mm
Max test load, Push/Pull	5400 / 2400 Pa	16-3.5 mm x 8.5 mm Drainage hole
Fire rating based on IEC/UL	Class A	ш →

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.

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