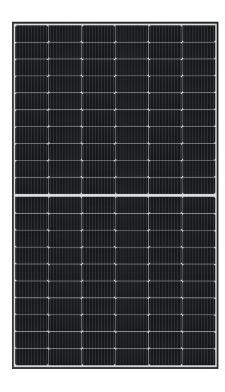
# SOLAR POWER SYSTEMS



### **SUNCELL PLUS**

N-TYPE COMMERCIAL SOLAR PANELS

SOLAHART480DH2





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 480W at Standard Test Conditions (STC)(1).

With a high-efficiency rating of 22.2%, 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:



# RELIABLE DESIGN

Dual-glass n-type technology and quality



#### SAFE AND DURABLE

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



#### **HIGH PERFORMANCE**

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



#### **VALUE FOR MONEY**

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



#### **SOLAHART WARRANTY**

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

## **TECHNICAL DATA**



Model		SOLAHART480DH2
Electrical Data		
Minimum performance at sta	ndard test conditions, STC <sup>(1)</sup> (Power Sorting 0 ~ +	+3%, Power Tolerance: +/-3.5%)
Power at MPP <sup>(2)</sup> - P <sub>MPP</sub>		480 Wp
Short circuit current - I <sub>sc</sub>		13.91 A
Open circuit voltage - V <sub>oc</sub>		43.46 V
Current at MPP - IMDD		13.14 A
Voltage at MPP - V <sub>MPP</sub>		36.52 V
Efficiency(1) - ŋ		22.20%
	rmal operating conditions, NMOT <sup>(3)</sup>	22.2070
	mial operating conditions, NMOT	7C1 Wn
Power at MPP - P <sub>MPP</sub>		361 Wp
Short circuit current - I <sub>sc</sub>		11.23 A
Open circuit voltage - V <sub>oc</sub>		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		SOLAHART480DH2
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% Solahart SunCell-Plus n-type
Glass thickness	1.6 mm front and 1.6 mm back	■ Typical p-type
Backsheet	White	93.4%
Frame	Black Anodised Aluminium	95.8% 93.1% 89.4% 87.4% 7
Cell	6 x 20 n-type monocrystalline solar half-cells	90.3%
Number of diodes	3	At least 99% of nominal power during the 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 to 25 years and 87.4% up to 30 years.
Cable	4 mm² solar cable; (+) 1300 mm, (-) 1300 mm	0 1 5 10 15 20 25
Connector	Stäubli MC4 EVO2 connectors (PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy)	All data within measurement tolerances.
Temperature Coefficie	nts	Dimensions - Measurements in mm
Normal module operating	41±2°C	1134 mm 30 mm
temp (NMOT) Temp coefficient of P <sub>MPP</sub> - γ	-0.29%/°C	4-Φ5.5 mm Ground hole 8-9 mm x 14 mm
Temp coefficient of $V_{oc}$ - $\beta$	-0.25%/°C	
Temp coefficient of $V_{oc}$ - $\beta$	-0.25%/°C +0.043%/°C	8-9 mm x 14 mm Mounting hole
· ·	·	8-8
Qualifications and Cer		8860 mm   11008 mm   1108 mm   11008 mm   11
IEC 61215: 2021; IEC 61730: 2016, Application class II.		
Properties for System	Design 1500 V	11.4 mm
Max system voltage - Vsys  Max reverse current - IR	25 A	1096 mm I
Max design load, Push/Pull	3600 / 1600 Pa	105 mg 9 mm
Max test load, Push/Pull	5400 / 2400 Pa	16-3.5 mm × 8.5 mm Drainage hole
		<u> </u>

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

 $<sup>^{(1)}1000 \</sup>text{ W/m}^2, 25 \pm 2^{\circ}\text{C}, \text{AM 1.5 G.} \quad ^{(2)}\text{Measurement tolerances P}_{\text{MPP}} \pm 3.5 \text{ %; I}_{\text{SC}} \quad \pm 5 \text{ %, V}_{\text{OC}} \pm 3.5 \text{ % at STC.} \quad ^{(3)}800 \text{ W/m}^2, \text{NMOT, spectrum AM 1.5 G.} \quad ^{\#}\text{Typical values, actual values may differ.}$ 

<sup>\*30-</sup>year Solahart Product Warranty covers certain defects with the Solahart SunCell Plus solar panels. Please refer to the 'Solahart PV 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.