

SOLAHART BLACK 295W SOLAR PANELS

SOLAHART295BLK

The new high-performance Solahart panel, with stylish black appearance, is the ideal solution for Australian homes thanks to its innovative and premium cell technology.

The state-of-the-art PERC monocrystalline cell was developed to achieve excellent performance under real conditions, even with low radiation intensity and on clear, hot summer days.

The black anodised aluminium frame has been built to withstand extreme weather conditions, including high winds, and reliable silicone connections ensure excellent stability and durability.

Other features include optimally positioned drainage holes to protect against frost damage, premium MC4 connecting plugs to secure a reliable connection, and a sealed junction box that offers corrosion protection and water resistance.

State-of-the-art cell technology:

For excellent performance under real conditions

Innovative all-weather technology:

Optimal yields, whatever the weather

Low electricity generation costs:

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

Stylish, efficient and durable:

Designed in Germany, manufactured in Korea and only available through



- ✓ high reliability
- ✓ low degradation
- product surveillance

ID. 40032587





PREMIUM TECHNOLOGY WITH A TOUCH OF CLASS AND A STRIKING BLACK FINISH

HOW YOU BENEFIT



HIGH SOLAR YIEI D

Innovative all-weather technology with excellent low-light and temperature behaviour results in more energy production per square metre.



HIGH PERFORMANCE

Long-term yield security with anti-LID technology, anti-PID Technology[^], Hot-Spot Protect and Solahart Quality Auditing.



EXTREME WEATHER RATING

High-tech aluminium alloy frame, certified for high wind loads and tested in Australia to resist the phenomenal pressures of 1 in 500-year cyclones.



SOLAHART WARRANTY

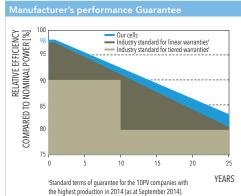
Enjoy a 12-year product warranty and a superior 25-year manufacturer's performance guarantee, for peace of mind.*

Technical Data

MODEL	SOLAHART295BLK - 295W SOLAR PANEL	
Mechanical Data		
Dimensions (H x W x D)	1670 x 1000 x 32 mm (including frame)	
Weight	18.5 Kg	
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology	
Back Cover	Composite film	
Frame	Black Anodised Aluminium	
Cell	6 x 10 monocrystalline solar cells	
Junction Box	Protection class ≥ IP67, with bypass diodes	
Cable	4 mm² solar cable; (+) 1000 mm, (-) 1000 mm	
Connector	Multi-Contact MC4, IP68	

Electrical Data			
Minimum performance at standard test conditions, STC ⁽¹⁾ (Power Tolerance +5 W / -0 W)		Minimum performance at normal operating conditions, NMOT ⁽²⁾	
Power at MPP ⁽¹⁾ - PMPP	295 Wp	Power at MPP - PMPP	220.1 Wp
Short circuit current ⁽¹⁾ - I _{sc}	9.70 A	Short circuit current# - Isc	7.82 A
Open circuit voltage ⁽¹⁾ - V _{oc}	39.48 V	Open circuit voltage# - Voc	37.14 V
Current at MPP# - IMPP	9.17 A	Current at MPP# - IMPP	7.20 A
Voltage at MPP# - VMPP	32.19 V	Voltage at MPP# - VMPP	30.58 V
Efficiency ⁽¹⁾ - η	≥17.7		

¹⁰⁾ Measurement tolerances PMPP ±3 %; Isc; Voc ±5 % at STC: 1000 W/m², 25±2°C, AM 1.5 G according to IEC 60904-3. 20 800 W/m², NMOT, spectrum AM 1.5 G. * Typical values, actual values may differ.

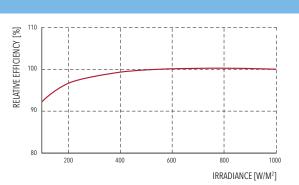


At least 98% of nominal power during the first year. Thereafter max 0.6 % degradation per year.

At least 92.6% of nominal power up to 10 years.

At least 83.6% of nominal power up to 25 years.

All data within measurement tolerances.



Typical panel performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m²).

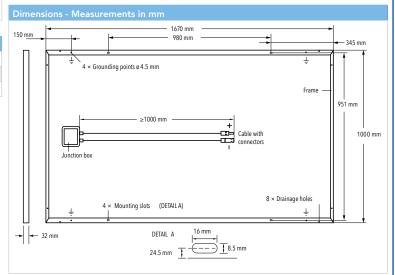
Temperature Coefficients	
Normal module operating temperature (NMOT)	43±3 °C
Temperature coefficient of PMPP - γ	-0.39 % / K
Temperature coefficient of V _{oc} - β	-0.28 % / K
Temperature coefficient of Isc - α	+0.04 % / K

Qualifications and Certificates

VDE Quality tested, IEC 61215:2016; IEC 61730:2016, Application class A. This datasheet complies with DIN EN 50380.

Other information	
Part Number	SOLAHART295BLK
Solahart Warranty*	12 years
Country of Manufacture	Korea

Properties for System Design				
Permitted module temperature on continuous duty	-40°C up to +85°C			
Maximum system voltage - Vsys	1000 V			
Maximum reverse current - IR	20 A			
Maximum design load, Push / Pull	3600 / 2667 Pa			
Maximum test load, Push / Pull	5400 / 4000 Pa			
Safety class / Fire rating	II / C			



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. ^APT test conditions according to IEC/TS 62804-1:2015, method B (-1500 V, 168 h).

