**SOLID Framed Glass/Glass** 

SOLITEK — OUR FLAGSHIP SOLAR PANEL

We are introducing the next generation bifacial solar panel BLACKSTAR



Fire class A



Salt mist resistance



Ammonia resistance

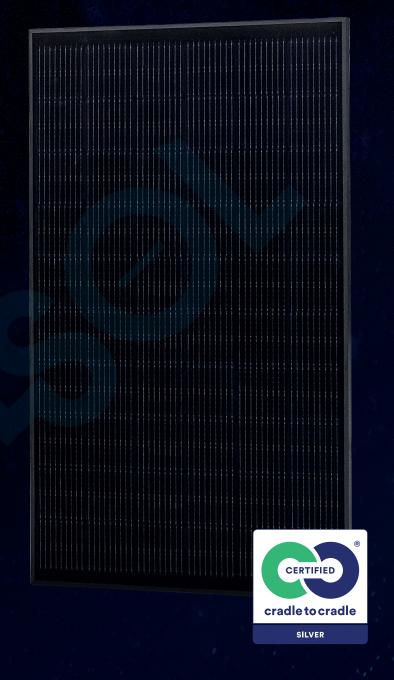


Dust and sand resistance

Positive sorting up to +5W

Bifacial \$ 365 W





Year

87 %

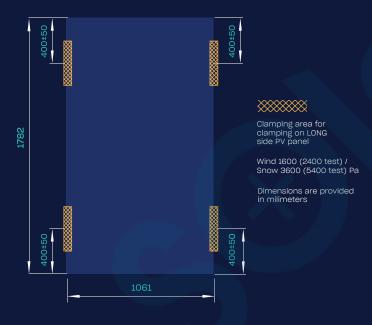
Year efficiency

## **SOLID Framed Glass/Glass**

Electrical data (STC*)	
Maximum power	365
Cell technology	Bifacial
Open circuit voltage (V <sub>oc</sub> /V) Short circuit current (I <sub>sc</sub> /A) Max power voltage (Vmpp/V) Max power current (Impp/A) Module efficiency (n)	40,39 11,16 34,65 10,55 19,30%
Max system voltage (V)	1500
Max current (A)  Power tolerance	20 0/+5W

\*Under standard test conditions (STC) of irradiance of 1000W/sq.m., spectru AM 1.5 and cell temperature of  $25^{\circ}$ C. Flash testing measurment accuracy of +/-5%. All transparency values are approximate +/-3%.

## **Dimensions & Mounting**





Temperature ratings	Bifacial
Current temperature coefficient (α) Voltage temperature coefficient (β) Power temperature coefficient (δ) Nominal operating module temperature	+0.04% / °C -0.35% / °C -0.47% / °C 46 °C
Mechanical data	
Dimensions (LxWxH) (mm) Weight (kg) Front / Back glass (mm) Cell Type Cell Size (mm) Busbars Frame Operating temperature (°C) Design load (wind/snow) (Pa)	1782x1061x35 mm 24 2 mm, black Bifacial 166x166 9 Black anodized aluminium frame -40 ÷ +85 1600/3600**
Maximum test load (wind/snow) (Pa) Junction box / IP class Cable cross section size (mm²) Cable length Bypass diodes Connector	2400/5400 Split junction box / IP68 4 1,2 m 3 MC4 compatible

<sup>\*\*</sup>Safety factor 1.5

## **Attention**

- Always check if your system is compatible with local environmental conditions (wind / snow load, temperatures) on your site to ensure safety and long-term energy production.
- · Do not connect differently orientated PV panels in the same string / MPPT of the inverter (unless optimizers are used).
- $\cdot$  Do not connect strings with an unequal amount of PV panels in one MPPT (unless optimizers are used).
- · Use PV panels of same electrical parameters in one string/MPPT (unless optimizers are used).
- · Always ensure that your inverter is equipped with DC disconnector. If not it is recommended to install it externally.
- · Never let different metals come in contact with each other. Use bi-metallic plates or plastic separators to eliminate galvanic corrosion.
- · It is highly recommended to install SPD's in both AC and DC circuits because overvoltages void the warranty for inverters and also panels if they are harmed.
- · It is highly recommended to ground PV panels mounting system and to install lightning protection in site.

## Tips for better power output

- · Better module ventilation and shorter connection cables increase electrical energy production.
- · Always observe object/mutual shading in site. Shading can drastically cut electrical energy generation output.
- · Increase PV panel height from the ground so that more light can travel beneath the module and then reflect.
- · The Albedo value increases significantly if the modules are installed above white, lightreflecting surfaces.

















