

# BLACKSTAR

SOLID Framed Glass / Glass

# 60 Cell

SOLITEK — OUR FLAGSHIP SOLAR PANEL

## We are introducing the next generation bifacial solar panel BLACKSTAR



Cradle to Cradle  
Certified™ Assessment  
Categories

SILVER



Ammonia  
resistance



Salt mist  
resistance



Dust & sand  
resistance



Fire class A

Positive sorting up to +5W

**Bifacial** ⚡ 360W

# 30

Product  
warranty

# 87%

Power  
guarantee

# 30

Efficiency  
guarantee

## SOLITEK

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Electrical data (STC*)	
Maximum Power	<b>360</b>
Cell Technology	<b>Bifacial</b>
Open circuit voltage ( $V_{oc}/V$ )	40,11
Short circuit Current ( $I_{sc}/A$ )	11,08
Max Power Voltage ( $V_{mpp}/V$ )	34,44
Max Power Current ( $I_{mpp}/A$ )	10,48
Module Efficiency ( $\eta$ )	19,04
Max System Voltage (V)	1500
Max Current (A)	20
Power Tolerance	0/+5W

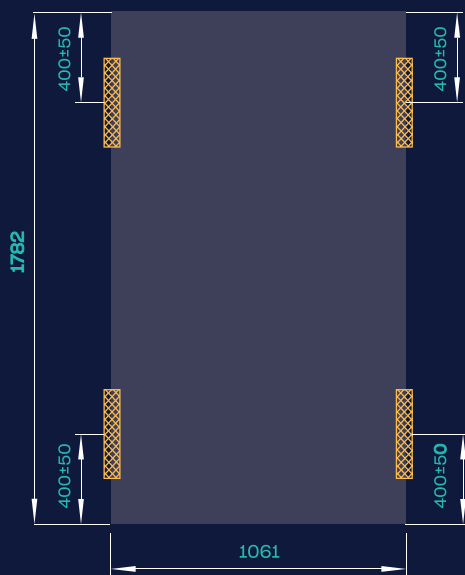
\*Under Standard Test Conditions (STC) of irradiance of 1000W/sq. m., spectrum AM 1.5 and cell temperature of 25°C


Temperature ratings	Bifacial
Current temperature coefficient ( $\alpha$ )	+0,04% /°C
Voltage temperature coefficient ( $\beta$ )	-0,35% /°C
Power temperature coefficient ( $\delta$ )	-0,47% /°C
Nominal Operating Module Temperature	46°C

Mechanical data	
Dimensions (LxWxH) (mm)	1782x1061x35
Weight (kg)	24
Front glass (mm)	2
Back glass (mm)	2, black (optional transparent)
Cell Type	Bifacial
Cell Size (mm)	166x166
Busbars	9
Frame	Black anodized aluminium frame
Operating Temperature (°C)	-40 ÷ +85
Max Load (wind/snow) (Pa)	1600/3600**
Junction Box / IP Class	Split junction box / IP68
Cable Cross Section Size (mm <sup>2</sup> )	4
Cable length	1,2 m
Bypass Diodes	3
Connector	MC4 compatible

\*\*Safety factor 1,5

## Dimensions & Mounting




Clamping area for clamping on LONG side PV panel
Wind 1600 (2400 test) / Snow 3600 (5400 test) Pa
Dimensions are provided in millimeters

## 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.
- By connecting less than 6 PV panels in one string there is a risk of inverter inability to start.
- Do not connect differently orientated PV panels in the same string / MPPT of the inverter (unless optimizers are used).
- 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 disconnect. 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 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 modules are installed above white, lightreflecting surfaces.

