

## Solar Module

# Glass-60 with frame

## 310 Wp bifacial (efficiency up to 360 Wp)



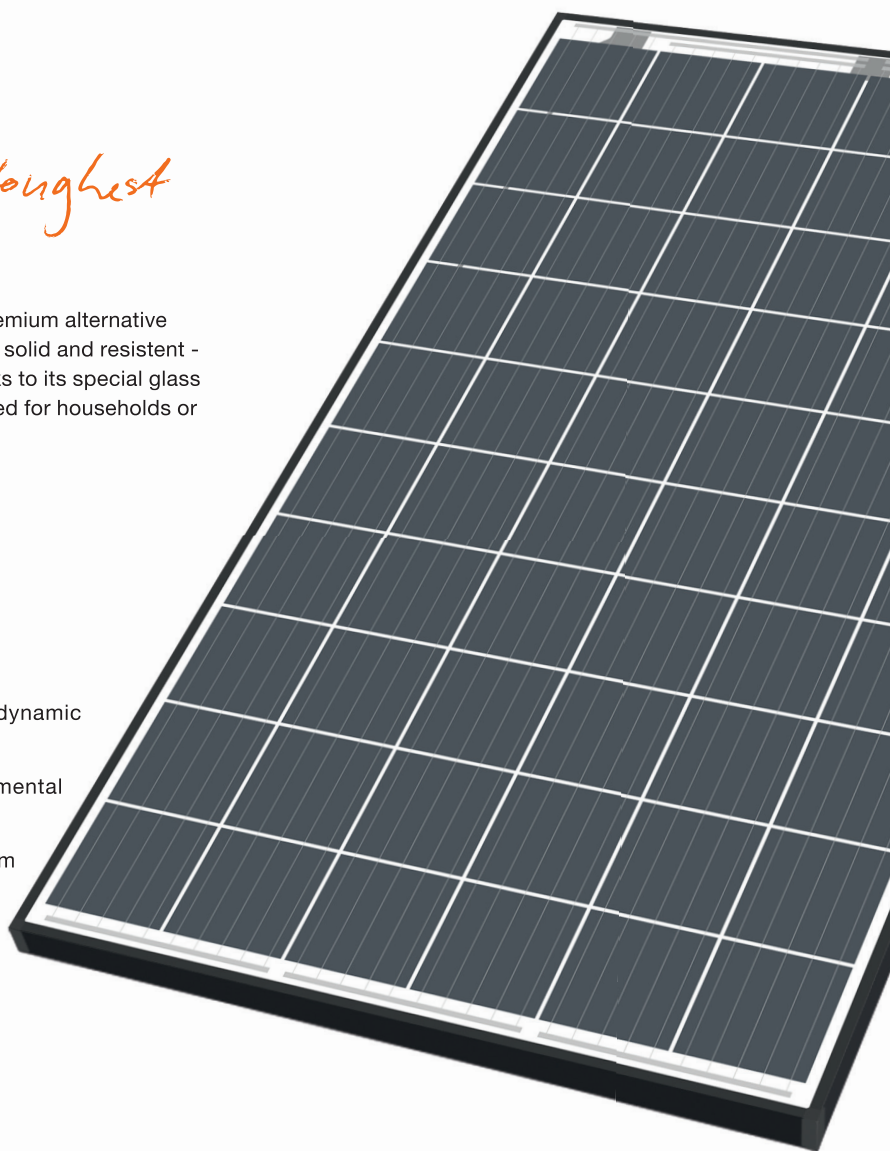
Eine Marke von  
**SONNENKRAFT**

*EXTREME! For the toughest applications*

The glass glass module from KIOTO SOLAR ist the premium alternative for onroof or free-standing PV systems. It is extremely solid and resistant - also against extreme environmental influences. Thanks to its special glass compound system it is extremely durable. It can be used for households or large-scale applications!

*Advantages:*

- // Extremely solid: improved cell protection against dynamic load due to glass on the backside
- // Extremely resistant: also against extreme environmental influences, less pollution
- // Extremely durable: special glass compound system
- // Extreme fire-resistance class because of double glazing
- // Extremely efficient: up to 360 Wp efficiency due to bifacial cell technology
- // Intelligent black frame concept for technical safety and nice design



## GLASS-60 WITH FRAME

# KPV GME NEC 310 Wp bifacial (efficiency up to 360 Wp)

## Module specifications

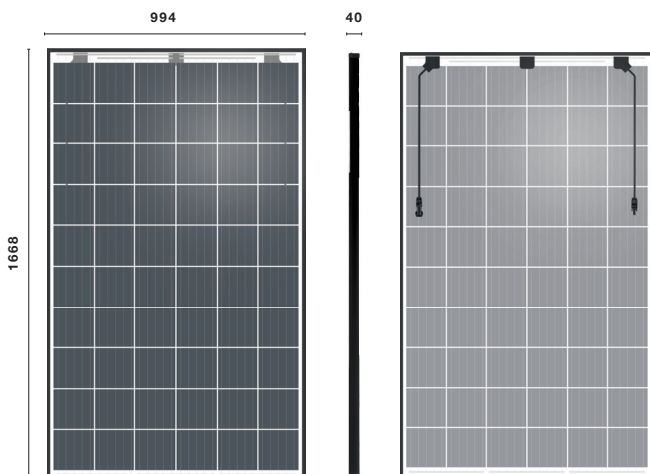
Type	P <sub>mp</sub> [Wp]	U <sub>mp</sub> [V]	I <sub>mp</sub> [A]	U <sub>oc</sub> [V]	I <sub>sc</sub> [A]	efficiency rate	area per kWp
310 mono/bifacial	310 Wp	32,91 V	9,42 A	39,28 V	9,85 A	18,76%	5,33 m <sup>2</sup>

## Electrical data

<b>60 crystalline cells</b>	157mm x 157mm
<b>Connecting System</b>	Decentralized connecting concept (3 pcs.), MC4 — plug in connector 4 mm <sup>2</sup>
<b>Max. system voltage</b>	1000V DC
<b>Power tolerance</b>	(+5W/-0W) Measurement: STC (standard test conditions)
<b>Temperature coefficients</b>	P <sub>mp</sub> -0,42 %/K U <sub>oc</sub> -0,32 %/K I <sub>sc</sub> +0,047 %/K
<b>Max. reverse over current</b>	15 A
<b>Operation temperature</b>	+85°C up to -40°C
<b>Cable length</b>	2 x 350mm
<b>Bypass diodes</b>	3 pcs.
<b>Efficiency guarantee</b>	min. 97% in the first year, afterwards max. 0,70 % reduction p.a. up to 25 years
<b>Product guarantee</b>	20 years

## Technical data

<b>incl. frame</b>	1668mm x 994mm x 40mm (+/- 2 mm)
<b>Weight</b>	21kg
<b>Glass specification</b>	Front: 2mm / Back: 2mm
<b>Test certificate</b>	IEC 61215, Ed. 2 incl. mechanical load test up to 5400 Pa, IEC 61730; IP 65
<b>Packaging</b>	24 modules / pal., 720 modules/truck



### Surplus for glass glass modules

- // 20 years surplus guarantee
- // +30% surplus efficiency thanks to bifacial cell technology

### Bifacial cell technology

- // up to 360 Wp overall performance thanks to active module back side
- // Use of PID-resistant module components
- // LID-effect nearly 0%
- // Use of 60 high-efficiency bifacial-cells
- // extremely solid thanks to laminated safety glass