



SONNENSTROM  
FABRIK



Optional: junction  
box 1500 Volt



Optional: 30yrs  
guarantee



Optional: Total-  
Care Insurance



EXCELLENT GLASS/GLASS M32

brilliant

MONOCRYSTALLINE 165-175 WP



## Transparency and Performance

The cell matrix is optimized for light transmission and maximum performance

The optimized cell matrix enables a light transparency of 51%

Optimizes electricity production whilst preserving daylight diffusion for agricultural greenhouses and buildings

Perfect architectural integration and control of natural light contribution for verandas, pergolas, awnings and carports

30 years linear performance guarantee  
20 years product guarantee  
Optional Total Care for the entire system

<sup>1</sup> For detailed information please consult the CS Wismar GmbH warranty conditions

<sup>2</sup> See backside for detailed test loads

<sup>3</sup> Subject to recertification

# EXCELLENT GLASS/GLASS 165 | 170 | 175 M32 brilliant

## Performance STC

Under standard Test Conditions STC:  
1000 W/m<sup>2</sup>; spectrum AM 1.5;  
Cell temperature 25°C  
Measurement tolerance STC:  
P<sub>mpp</sub> ±3%; I<sub>sc</sub> ±10%; U<sub>oc</sub> ±10%

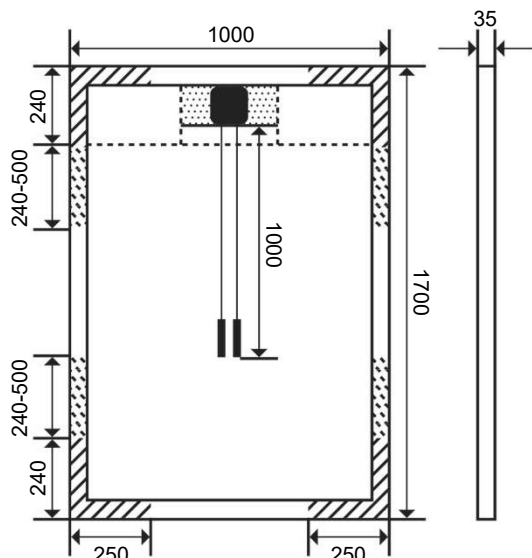
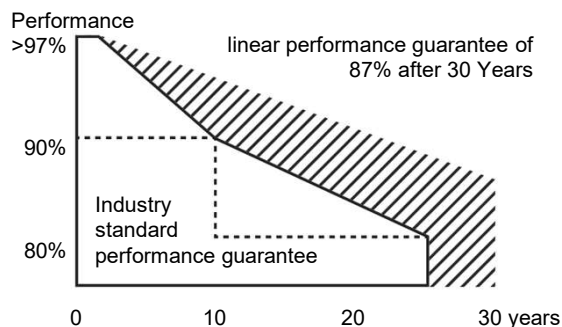
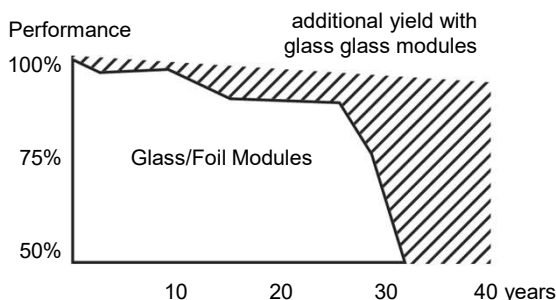
Nominal Power P <sub>mpp</sub> (Wp)	165	170	175
Open Circuit Voltage U <sub>oc</sub> (V)	21,16	21,39	21,59
Voltage U <sub>mpp</sub> (V)	17,72	17,99	18,25
Short Circuit Current I <sub>sc</sub> (A)	9,99	10,19	10,39
Current I <sub>mpp</sub> (A)	9,31	9,45	9,59
Efficiency η (%)	9,7	10,0	10,3

Reduction of module efficiency at reduction from 1000 W/m<sup>2</sup> to 200 W/m<sup>2</sup>: 6,1% ± 0,3% (relative)

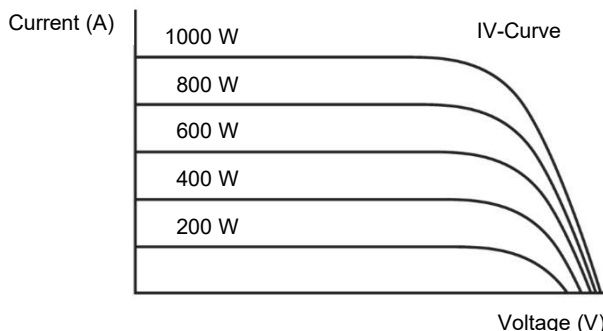
## Performance NMOT

Nominal operating temperature of module  
800 W/m<sup>2</sup>, NMOT, AM 1.5

Nominal Power P <sub>mpp</sub> (Wp)	125	129	133
Open Circuit Voltage U <sub>oc</sub> (V)	19,79	20,00	20,19
Voltage U <sub>mpp</sub> (V)	16,82	17,07	17,32
Short Circuit Current I <sub>sc</sub> (A)	8,07	8,23	8,40
Current I <sub>mpp</sub> (A)	7,43	7,54	7,65



measurements in mm



**clamping area**  
 approved up to 2.400 Pa (suction & pressure)  
 approved up to 2.400 Pa (suction)/ 5.400 Pa (pressure)  
 no contact between junction box and mounting profile permitted in this area.

## Other Technical Specification

Max. system voltage	1000 V
Weight	ca. 22.0 kg
Reverse Current Load IR	15 A
Junction box	IP 67 with 3 bypass diodes
Connectors	IP 67, MC4
Fire rating	class C
Operating temperature	-40°C ... +85°C
Design load: snow	5.400 Pa *
Max test load	8.100 Pa
Design load: wind	2.400 Pa *
Max test load	3.600 Pa

\* safety factor 1.5

## Thermal Properties

TC P <sub>mpp</sub>	-0.39 %/K
TC U <sub>oc</sub>	-0.28 %/K
TC I <sub>sc</sub>	0.040 %/K
NMOT	45 +/- 2 °C

## Material Used

No. of cells	32 cells
Type of cells	monocrystalline
Front	hardened solar glass
Frame	anodized aluminium
Frame height	35 mm

