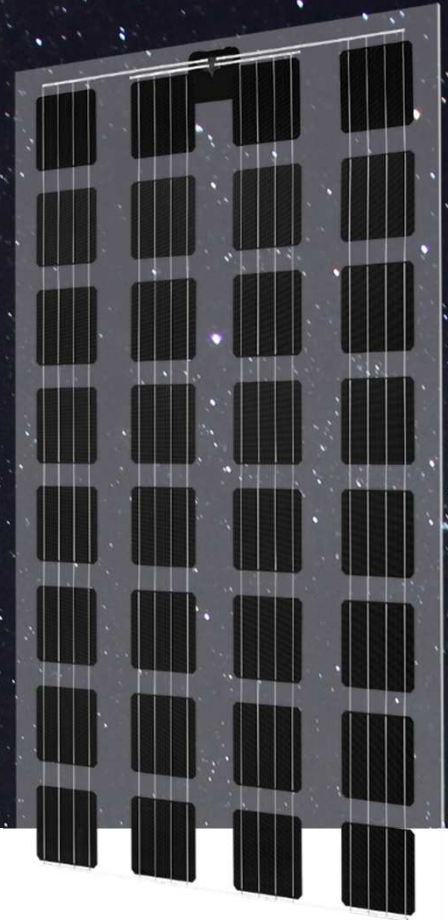


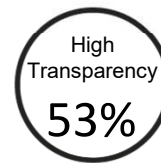


SONNENSTROM
FABRIK



EXCELLENT GLASS/GLASS PERC32
brilliant frameless

PERC 160-170 WP



Transparency and Performance

The cell matrix is optimized for light transmission and maximum performance

The optimized cell matrix enables a light transparency of 53%

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

EXCELLENT GLASS/GLASS 160 | 165 | 170 PERC32 brilliant frameless

Performance STC

Under standard Test Conditions STC:
1000 W/m²; spectrum AM 1.5;
Cell temperature 25°C
Measurement tolerance STC:
P_{mpp} ±3%; I_{sc} ±10%; U_{oc} ±10%

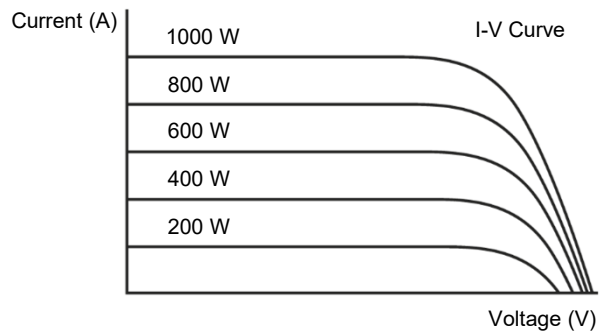
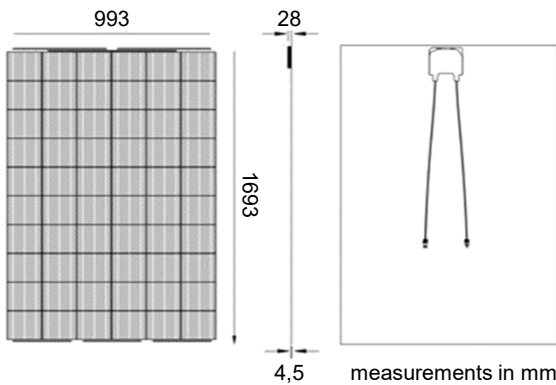
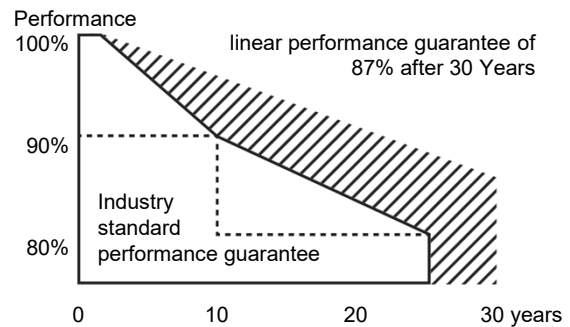
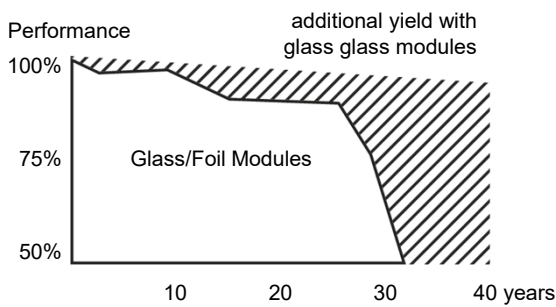
Nominal Power P _{mpp} (Wp)	160	165	170
Open Circuit Voltage U _{oc} (V)	20,95	21,16	21,39
Voltage U _{mpp} (V)	17,45	17,72	17,99
Short Circuit Current I _{sc} (A)	9,79	9,99	10,19
Current I _{mpp} (A)	9,17	9,31	9,45
Efficiency η (%)	9,5	9,8	10,1

Reduction of module efficiency at reduction from 1000 W/m² to 200 W/m²: 6,1% ± 0,3% (relative)

Performance NMOT

Nominal operating temperature of module
800 W/m², NMOT, AM 1.5

Nominal Power P _{mpp} (Wp)	121	125	129
Open Circuit Voltage U _{oc} (V)	19,59	19,79	20,00
Voltage U _{mpp} (V)	16,57	16,82	17,07
Short Circuit Current I _{sc} (A)	7,91	8,07	8,23
Current I _{mpp} (A)	7,32	7,43	7,54



Other Technical Specification

Max. system voltage	1000 V
Weight	20.0 ± 0.5 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	1.600 Pa *
Max test load	2.400 Pa
Design load: wind	1.600 Pa *
Max test load	2.400 Pa

Thermal Properties

TC P _{mpp}	-0.39 %/K
TC U _{oc}	-0.28 %/K
TC I _{sc}	0.040 %/K
NMOT	45 +/- 2 °C

Material Used

No. of cells	32 cells
Type of cells	mono perc
Front	hardened solar glass
Frame	n/a
Frame height	n/a

* safety factor 1.5

