



**INTEGRATION GLASS/GLASS
PERC54**

PERC 270-285 Wp

Schweizer



**Exquisitly designed
in-roof panel**

Inroof system, BIPV-Typ EN 50583, Category A

2 x 2 mm strong, hardened and scratchresistant solar glass

Protection of cells against microcracks through double glass composite

Easy to install, reliable operation

Rainproof like a tiled roof (SIA 232/1)

Excellent mechanical load values, compressive load up to 5,400 Pa ²

Hail class HW 3

**Optimized for
performance**

PID-free PERC high performance solar cells

Antireflective coated solar glass

Low-light optimized

Positively classified -0/+4.99 Wp

Industry-leading NMOT values

**Highest quality
standards**

Manufactured according to
DIN EN ISO 9001:2015
DIN EN ISO 14001:2015
BS OHSAS 18001:2007

PV-module type approval according to IEC 61215:2016 ³

PV-module safety qualification according to IEC 61730:2016 ³

Fire class: hard roofing (Euro class E)

**Guaranteed
performance ¹**

30 years of linear performance guarantee

20 years product guarantee, optional extension to 30 years

Total Care for the entire system (optional)

¹ For detailed information please consult the CS Wismar GmbH warranty conditions

² See backside for detailed test loads

³ Subject to recertification

INTEGRATION GLASS/GLASS 270 | 275 | 280 | 285 PERC54

Performance STC

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

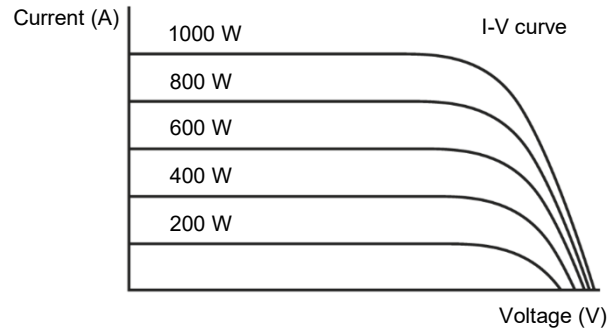
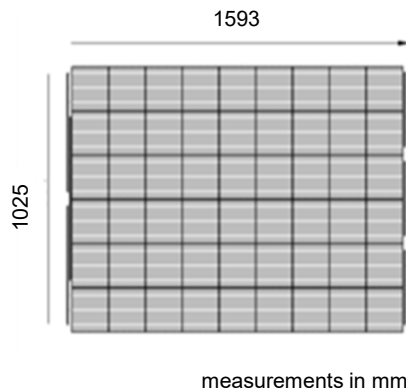
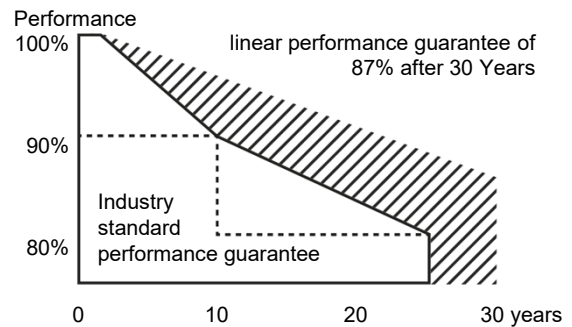
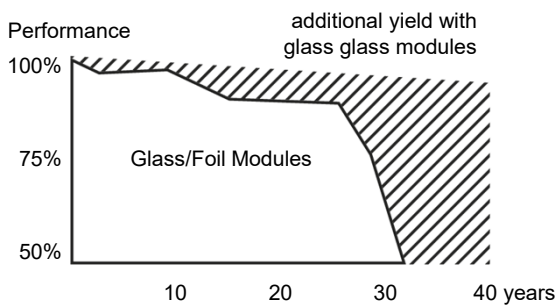
Nominal Power P _{mp} (Wp)	270	275	280	285
Open Circuit Voltage U _{oc} (V)	35,55	36,22	36,27	36,32
Voltage U _{mp} (V)	29,45	29,63	29,82	30,07
Short Circuit Current I _{sc} (A)	9,74	9,84	9,89	10,06
Current I _{mp} (A)	9,17	9,28	9,39	9,48
Efficiency η (%)	16,5	16,8	17,1	17,5

Reduction of module efficiency at reduction from 1000 W/m² to 200 W/m²: 2,4% ± 0,3% (relative)

Performance NMOT

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

Nominal Power P _{mp} (Wp)	210	215	219	222
Open Circuit Voltage U _{oc} (V)	33,25	33,87	33,92	33,97
Voltage U _{mp} (V)	28,73	29,00	29,16	29,37
Short Circuit Current I _{sc} (A)	7,87	7,95	7,99	8,13
Current I _{mp} (A)	7,32	7,41	7,49	7,57



Other Technical Specification

Max. system voltage	1000 V
Weight	20.0 ± 0.5 kg
Reverse Current Load I _R	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	3.600 Pa *
Max test load	5.400 Pa
Design load: wind	1.600 Pa *
Max test load	2.400 Pa
Outer dimensions	1593 x 1025 mm
Raster dimensions	1575 x 993 mm

* safety factor 1.5

Thermal Properties

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

Material Used

No. of cells	54 cells
Type of cells	mono perc
Front	hardened solar glass
Frame	Solrif frame
Frame height	16 mm
Module height	35 mm

