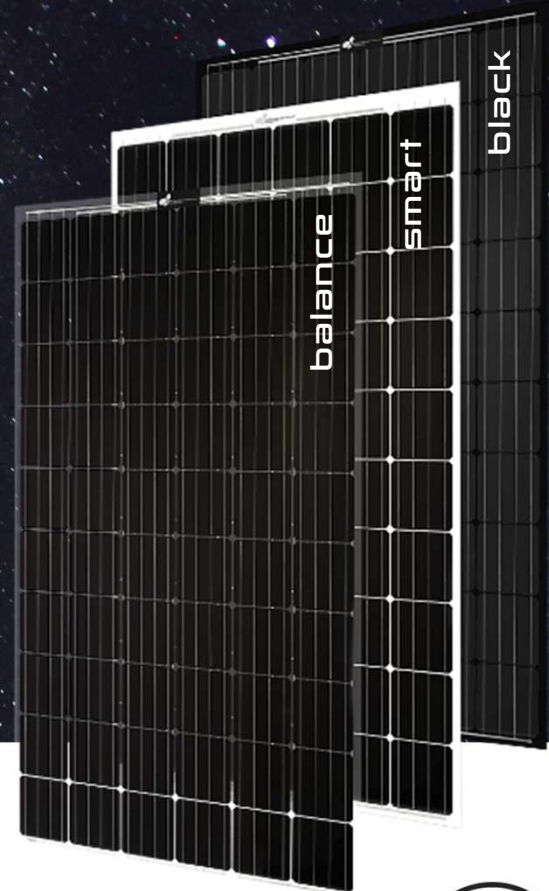


**Optional**  
**1500 volts module edition**  
 optional in transparent, white, full black  
**Total Care for the entire system**  
**Extended product guarantee**



**EXCELLENT GLASS/GLASS PERC60**  
**balance | smart | black frameless**

PERC 305-320 Wp



**Long lifetime even under extreme conditions**

2 x 2 mm strong, hardened and scratchresistant solar glass

Protection of cells against microcracks through double glass composite

Maximum test load 2.400 Pascal <sup>2</sup>

**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 <sup>3</sup>

PV-module safety qualification according to IEC 61730:2016 <sup>3</sup>

**Guaranteed performance <sup>1</sup>**

30 years of linear performance guarantee

20 years product guarantee, optional extension to 30 years

Total Care for the entire system (optional)

<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 305 | 310 | 315 | 320 PERC60

balance | smart | black frameless

## Performance STC

Under standard Test Conditions STC:  
1000 W/m<sup>2</sup>; spectrum AM 1.5;  
Cell temperature 25°C  
Measurement tolerance STC:  
Pmpp ±3%; Isc ±10%; Uoc ±10%

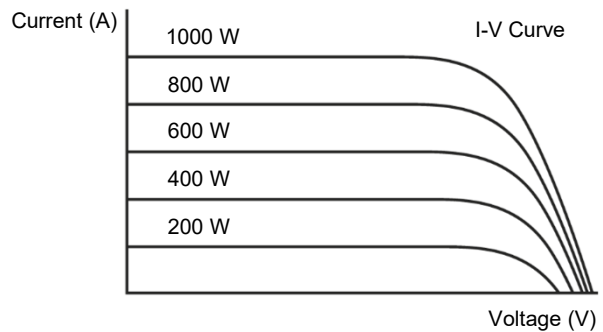
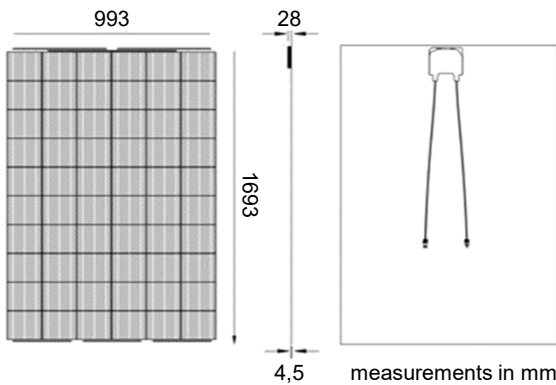
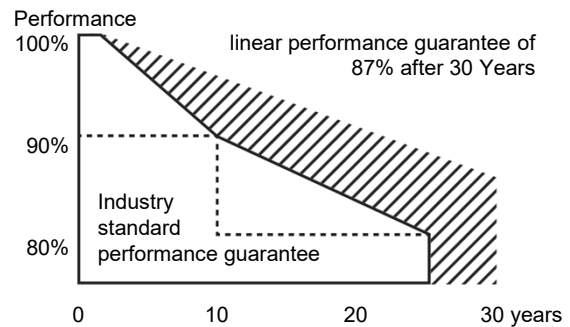
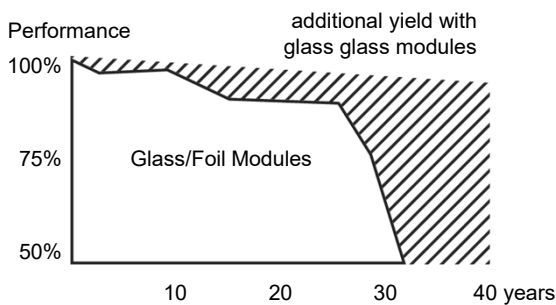
Nominal Power Pmpp (Wp)	305	310	315	320
Open Circuit Voltage Uoc (V)	39,62	39,82	40,03	40,22
Voltage Umpp (V)	32,94	33,16	33,37	33,61
Short Circuit Current Isc (A)	9,87	9,98	10,09	10,20
Current Impp (A)	9,26	9,35	9,44	9,52
Efficiency η (%)	18,1	18,4	18,7	19,0

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

## Performance NMOT

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

Nominal Power Pmpp (Wp)	239	243	246	250
Open Circuit Voltage Uoc (V)	37,05	37,24	37,44	37,61
Voltage Umpp (V)	32,29	32,50	32,71	32,94
Short Circuit Current Isc (A)	7,97	8,06	8,15	8,24
Current Impp (A)	7,39	7,46	7,53	7,60



## 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

\* safety factor 1.5

## Thermal Properties

TC Pmpp	-0.39 %/K
TC Uoc	-0.28 %/K
TC Isc	0.040 %/K
NMOT	45 +/- 2 °C

## Material Used

No. of cells	60 cells
Type of cells	mono perc
Front	hardened solar glass
Frame	n/a
Frame height	n/a

