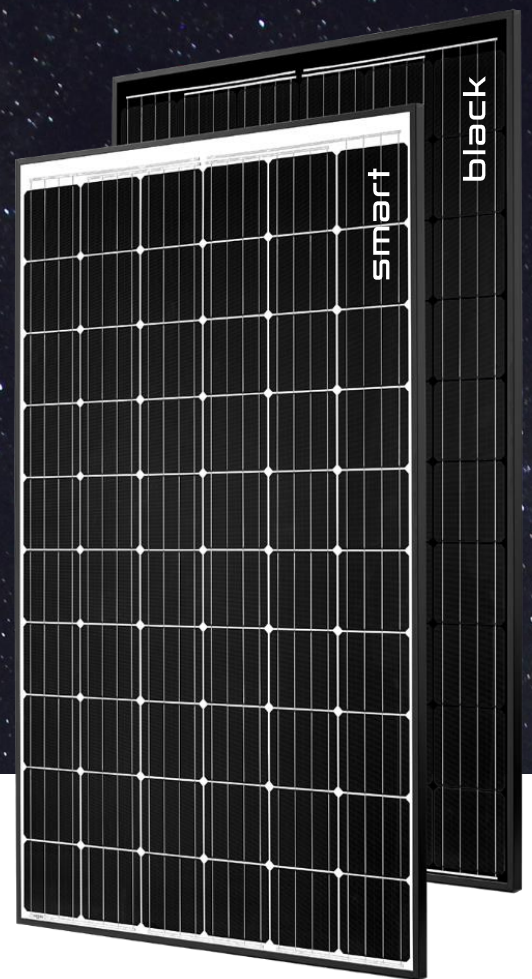




EXCELLENT PERC60 smart | black

PERC 295-310 Wp

Highest esthetics, easy and flexible installation

Elegant and attractive
design

Optionally available as full
black edition

Extended clamping areas

Upside down installation
possible

Optimized for performance

PERC high performance
solar cells

Antireflective glass
ensures high yields even at
diffuse irradiation

Positively classified
-0/+4.99 Wp

Industry-leading NMOT
values

Highest quality standards

Manufactured in
accordance with
DIN EN ISO 9001:2015
DIN EN ISO 14001:2015
BS OHSAS 18001:2007

PV-module type approval
according to
IEC 61215:2016¹

PV-module safety qualification
according to
IEC 61730:2016¹

Salt spray corrosion testing
according to IEC 61701¹

Ammonia resistance testing
according to IEC 62716 ¹

Guaranteed performance *

26 years linear
performance guarantee

12 years product
guarantee

Optional extension of
product guarantee to 20
years

Optional Total Care
for the entire system

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

¹ Subject to recertification

EXCELLENT 295 | 300 | 305 | 310 PERC60 smart | black

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%

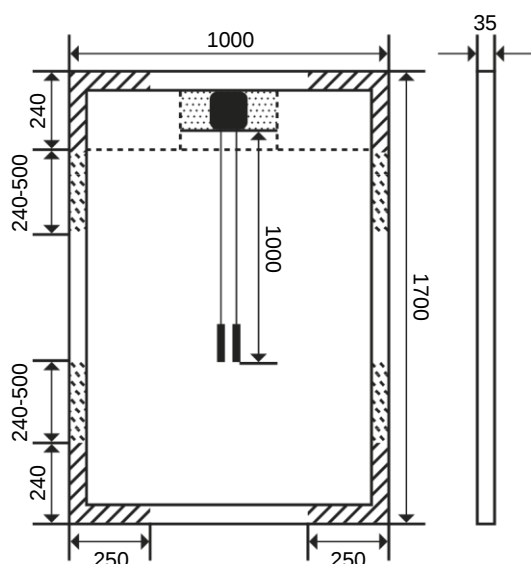
Nominal Power P _{mp} (Wp)	295	300	305	310
No-load voltage U _{oc} (V)	39,15	39,28	39,62	39,82
Voltage U _{mp} (V)	32,52	32,72	32,94	33,16
Short Circuit Current I _{sc} (A)	9,66	9,76	9,87	9,98
Current I _{mp} (A)	9,07	9,17	9,26	9,35
Efficiency η (%)	17,4	17,6	17,9	18,2

Reduction of module efficiency at reduction from 1000 W/m² to 200 W/m²: 2,5% ± 0,2% (relative)

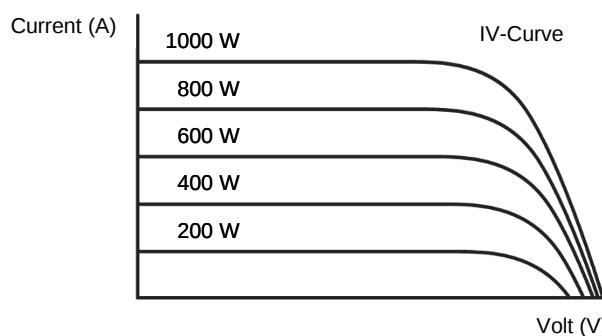
Performance NMOT

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

Nominal Power P _{mp} (Wp)	231	235	239	243
No-load voltage U _{oc} (V)	36,61	36,74	37,05	37,24
Voltage U _{mp} (V)	31,86	32,05	32,29	32,50
Short Circuit Current I _{sc} (A)	7,81	7,89	7,97	8,06
Current I _{mp} (A)	7,24	7,32	7,39	7,46



measurements in mm



clamping area
approved up to 2.400 Pa
approved up to 5.400 Pa
no contact between junction box and mounting profile permitted in this area.

Other Technical Specification

Max. system voltage	1000 V
Weight	19.0 ± 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	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 _{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	60 cells
Type of cells	mono perc
Front	hardened solar glass
Frame	anodized aluminium
Frame height	35 mm

