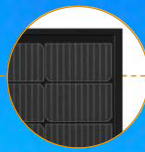


Smart



Full Black



Optional: Junction box  
1500 Volt



Optional: Heavy snow  
load frame



Optional: 25 yrs  
guarantee



Optional: Total-  
Care Insurance



## SAPPHIRE M108

395 - 405 WP

MONOCRYSTALLINE



### Long lifetime even under extreme conditions

Extended clamping areas and upside down installation possible

Maximum test load 8.100 Pa. <sup>2</sup>

Original MC4 plugs and fire resistant cables

Stability optimized for increased requirements due to slipping snow loads (optional)

### Optimized for performance

PID-free monocrystalline 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  
DIN EN ISO 45001:2018

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>

26 years of linear performance guarantee

12 years product guarantee, optional extension to 25 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

# SAPPHIRE 395 | 400 | 405 M108 smart | full black

## 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%

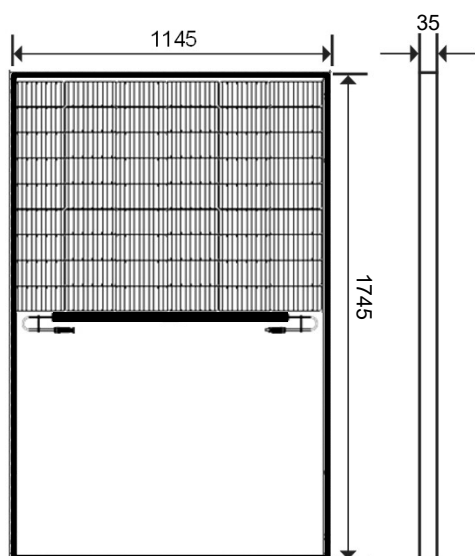
Nominal Power P <sub>mpp</sub> (Wp)	395	400	405
Open Circuit Voltage U <sub>oc</sub> (V)	37,14	37,20	37,36
Voltage U <sub>mpp</sub> (V)	30,98	31,17	31,36
Short Circuit Current I <sub>sc</sub> (A)	13,58	13,68	13,78
Current I <sub>mpp</sub> (A)	12,76	12,84	12,92
Efficiency η (%)	19,8	20,0	20,3

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

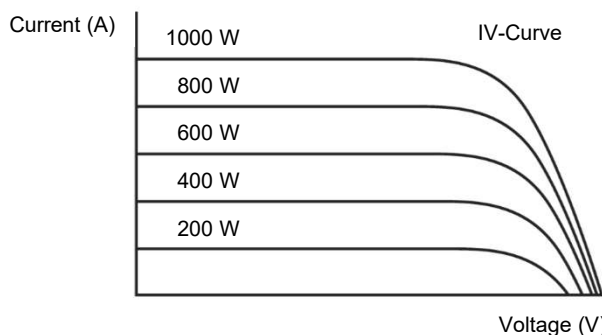
## Performance NMOT

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

Nominal Power P <sub>mpp</sub> (Wp)	308	312	316
Open Circuit Voltage U <sub>oc</sub> (V)	34,73	34,79	34,94
Voltage U <sub>mpp</sub> (V)	30,26	30,42	30,60
Short Circuit Current I <sub>sc</sub> (A)	10,97	11,05	11,13
Current I <sub>mpp</sub> (A)	10,18	10,25	10,31



Maßangaben in mm



## Other Technical Specification

Max. system voltage	1000 V
Weight	22.0 ± 0.5 kg
Reverse current load IR	25 A
Junction Box	IP65/ IP68
Connector	IP65/ IP68, MC4
Fire Class Rating	Class C
Operating temperature	-40°C ... +85°C
design load: snow*	5.400 Pa
maximum test load	8.100 Pa
design load: wind*	2.400 Pa
maximum 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

Number of cells	108 half-cut cells
Cell type	mono perc
Front cover	hardened solar glass
Frame material	anodized aluminium
Frame height	35 mm

## Applied Standards

- ISO 9001:2015
- ISO 14001:2015
- ISO 45001:2018
- IEC 61215:2016 & IEC 61730:2016
- IEC 61701:2020