

PENTA⁺ Premium

Monocrystalline high power solar module

ASM6610M (BF) Series

- ▶ Combining aesthetic with high power density
- ▶ With innovative 5-busbar mono PERC cell
- ▶ High module efficiency for optimal roof utilisation
- ▶ Increased efficiency through reduced series resistance

295 300 305 310 EN

ELECTRICAL SPECIFICATIONS ¹

	295 Wp	300 Wp	305 Wp	310 Wp
STC ² rated output (P _{mpp})*	295 Wp	300 Wp	305 Wp	310 Wp
Standard sorted output	-0/+3%			
Warranted power output STC (P _{nominal})	295 Wp	300 Wp	305 Wp	310 Wp
Rated voltage (V _{mpp}) at STC	31.30 V	31.54 V	31.79 V	32.03 V
Rated current (I _{mpp}) at STC	9.51 A	9.59 A	9.67 A	9.76 A
Open circuit voltage (V _{oc}) at STC	39.41 V	39.61 V	39.82 V	40.02 V
Short circuit current (I _{sc}) at STC	9.78 A	9.84 A	9.89 A	9.94 A
Module efficiency	18.03%	18.34%	18.65%	18.95%
Rated output (P _{mpp}) at NOCT ³	219.4 Wp	223.1 Wp	226.8 Wp	230.5 Wp
Rated voltage (V _{mpp}) at NOCT	28.92 V	29.15 V	29.38 V	29.60 V
Rated current (I _{mpp}) at NOCT	7.59 A	7.65 A	7.72 A	7.79 A
Open circuit voltage (V _{oc}) at NOCT	36.59 V	36.78 V	36.97 V	37.16 V
Short circuit current (I _{sc}) at NOCT	7.87 A	7.91 A	7.96 A	8.00 A

Temperature coefficient (P _{mpp})	-0.416% / K	Maximum system voltage	1000 V _{dc}
Temperature coefficient (I _{sc})	+0.037% / K	Number of diodes	3
Temperature coefficient (V _{oc})	-0.299% / K	Reverse current loadability (I _R)	20 A
Normal operating cell temperature (NOCT)	46°C ±2°C	Maximum series fuse rating	15 A

¹ Measuring uncertainty P_{mpp}: +/- 3%; Tolerance for V_{oc}, I_{sc}, V_{mpp} and I_{mpp}: +/- 10 %

² Standard test conditions that are defined as follows:

1.000 W/m² irradiation at a spectral density of AM 1.5 and a cell temperature of 25°C,

³ Nominal operating temperature of the cell at 800 W/m² irradiation, 20°C ambient temperature, wind speed of 1 m/s

⁴ Manufactured in an ISO 9001/14001/50001 certified facility



RELATED PARAMETERS

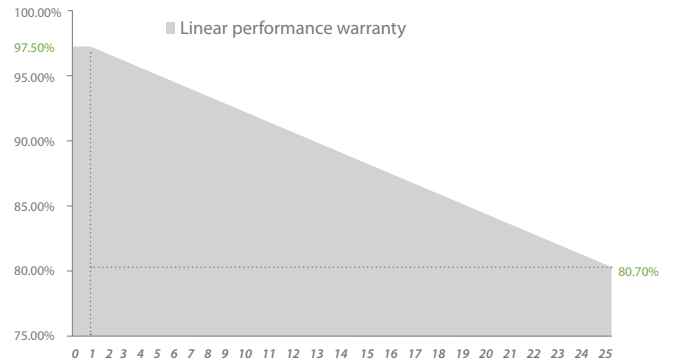
Cell type	Monocrystalline PERC cell, 5-busbar technology
Number of cells / cell arrangement	60 / 6 x 10
Cells dimension	157 x 157 mm ²

MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H) ⁵	1654 x 989 x 40 mm
Frame technology	Aluminum, black anodized
Module composition	Glass / EVA / Backsheet (white)
Weight	18.2 kg
Front glass thickness	3.2 mm
Junction box IP rating	IP 67
Cable length	1000 mm (incl. connector)
Cable core diameter	4 mm ²
Maximum load capacity ⁶	6000 Pa
Fire class (IEC 61730)	C
Connector type	MC4 original

QUALIFICATION AND LINEAR WARRANTIES

Product standard	IEC 61215 Ed. 2, IEC 61730
Extended product warranty ⁷	12 years
Performance warranty ⁷	Linear performance warranty
Year 1	> 97.5% of warranted output power
Year 25	> 80.7% of warranted output power



MODULE DIMENSION DETAILS

Front view	Side view	Rear view	Frame cross section
		<p>Frame without mounting wholes</p>	

⁵ Dimensional tolerance: +/-2 mm

⁶ In accordance with IEC 61215 Ed. 2

⁷ According to the current warranty conditions of Astronergy Solarmodule GmbH

© Astronergy Solarmodule GmbH
Specification and designs included in this datasheet are subjected to change without notice
All rights reserved.