

VIOLIN[™]

Crystalline PV Module ASM6610M(BL) Series

- ▶ With innovational 4-busbar cells
- Reducing cell series resistance
- ► Increasing cell efficiency
- More power output

270 275 280 285	290 295					EN
ELECTRICAL SPECIFICATIONS ¹						
STC ² rated output (P _{max})	270 Wp	275 Wp	280 Wp	285 Wp	290 Wp	295 Wp
Standard sorted output			-0/+3	3%		
Warranted power output STC (Pnominal)	270 Wp	275 Wp	280 Wp	285 Wp	290Wp	295 Wp
Rated voltage (V _{mpp}) at STC	31.35 V	31.45 V	31.55 V	31.65 V	31.75 V	31.85 V
Rated current (Impp) at STC	8.75 A	8.86 A	8.98 A	9.09 A	9.21 A	9.32 A
Open circuit voltage (Voc) at STC	37.95 V	38.05 V	38.15 V	38.25 V	38.35 V	38.45 V
Short circuit current (Isc) at STC	9.18 A	9.28 A	9.38 A	9.48 A	9.58 A	9.68 A
Module efficiency	16.51%	16.81%	17.12%	17.42%	17.73%	18.03%
Rated output (P _{mpp}) at NOCT ³	201.1 Wp	204.4 Wp	207.7 Wp	211.0 Wp	214.4 Wp	217.7 Wp
Rated voltage (V_{mpp}) at NOCT	28.64 V	28.73 V	28.82V	28.91 V	29.00 V	29.09 V
Rated current (Impp) at NOCT	7.02 A	7.11 A	7.21 A	7.30 A	7.39 A	7.48 A
Open circuit voltage (Voc) at NOCT	34.83 V	34.93 V	35.02 V	35.11 V	35.20 V	35.29 V
Short circuit current (Isc) at NOCT	7.43A	7.51 A	7.59 A	7.67 A	7.75 A	7.83 A

Temperature coefficient (P _{mpp})	- 0.42 % / K	Maximum system voltage	1000 VDC
Temperature coefficient (Isc)	+0.059%/K	Number of diodes	3
Temperature coefficient (V_{oc})	- 0.32%/K	Reverse current loadability (IR)	20 A
Normal operating cell temperature (NOCT)	48 °C ±2 °C	Maximum series fuse rating	15 A

 1 Measuring uncertainity Pmpp: +/–3 %; Tolerance for Voc, Isc, Vmpp and Impp: +/–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 ISO9001/14001 certified facility

Made in

Germany



CERT

BS OHSAS 18



CERT

ISO 9001 ISO 14001



RELATED PARAMETERS		
Cell type	Monocrystalline cell, 4-busbar technology	
Number of cells / cell arrang	ement 60 / 6 x 10	
Cells dimension	157 x 157 mm²	

MECHANICAL SPECIFICATIONS		
Outer dimensions (L x W x H) $^{\scriptscriptstyle 5}$	1654 x 989 x 40 mm	
Frame technology	Aluminum, black anodized	
Module composition	Glass / EVA / Backsheet (black)	
Weight (module only)	18.2 kg	
Front glass thickness	3.2 mm	
Junction box IP rating	IP 67	
Cable length	1000 mm	
Cable diameter	4 mm ²	
Maximum load capacity ⁶	6000 Pa	
Fire class (IEC 61730)	C	
Connector type	MC4 pluggable	

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 Side view Front view Rear view Frame cross section 989 40 989 60 •ø 5.2 🕀 (**∔**)ø 5.2∎ 40 mm 1654 1134 1654 **∢**ø 5.2 ⊕ (**∔**)ø 5.2► 260 13.9 mm . O No mounting holes on the frame.

⁵ Dimensional tolerance: +/-2 mm ⁶ In accordance with IEC 61215 Ed. 2

⁷ According to the current warranty conditions of Astronergy Solarmodule GmbH

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