

VIOLINTM

Crystalline PV Module ASM6610M(BL) Series

- ▶ With innovative 4-busbar mono cell
- ► Reduced series resistance
- ► Increased cell efficiency
- ► More power output

ELECTRICAL SPECIFICATIONS 1				
STC ² rated output (P _{max})	270 Wp	275 Wp	280 Wp	285 Wp
Standard sorted output	-0/+3%			
Warranted power output STC (Pnominal)	270 Wp	275 Wp	280 Wp	285 Wp
Rated voltage (V _{mpp}) at STC	31.35 V	31.45 V	31.55 V	31.65 V
Rated current (I _{mpp}) at STC	8.75 A	8.86 A	8.98 A	9.09 A
Open circuit voltage (V₀c) at STC	37.95 V	38.05 V	38.15 V	38.25 V
Short circuit current (Isc) at STC	9.18 A	9.28 A	9.38 A	9.48 A
Module efficiency	16.51%	16.81%	17.12%	17.42%
Rated output (Pmpp) at NOCT ³	201.1 Wp	204.4 Wp	207.7 Wp	211.0 Wp
Rated voltage (V _{mpp}) at NOCT	28.64 V	28.73 V	28.82V	28.91 V
Rated current (Impp) at NOCT	7.02 A	7.11 A	7.21 A	7.30 A
Open circuit voltage (Voc) at NOCT	34.83 V	34.93 V	35.02 V	35.11 V
Short circuit current (Isc) at NOCT	7.43A	7.51 A	7.59 A	7.67 A

Temperature coefficient (P _{mpp})	-0.442%/K
Temperature coefficient (Isc)	+0.042%/K
Temperature coefficient (Voc)	-0.329%/K
Normal operating cell temperature (NOCT)	48°C ±2°C

Maximum system voltage	1000 V _{DC}
Number of diodes	3
Reverse current loadability (IR)	20 A
Maximum series fuse rating	15 A

















ΕN

 $^{^1}$ Measuring uncertainity Pmpp: +/–3 %; Tolerance for Voc, lsc, 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,
Nominal operating temperature of the cell at 800 W/m² irradiation, 20°C ambient temperature, wind speed of 1 m/s
Manufactured in an ISO9001/14001/50001 certified facility

RELATED PARAMETERS		
Cell type Monocrystalline cell, 4-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 (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)	С		
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 DETAIL Front view	Side view	Rear view	Frame cross section
989		● 95.2 ● ⊕ 95.2 ● ⊕ 95.2 ● ⊕ 95.2 ● ⊕ 95.2 ● ⊕ 95.2 ● ⊕ 95.2 ● ⊕ 95.2 ● ⊕ 95.2 ● ⊕ 95.2 ● ⊕ 96.9 ● ● 96.9 ● ● 96.9 ● ● 96.9 ● ● 96.9 ● ● 96.9 ● ● 96.9 ● ● 96.9 ● ● 96.9 ● ● 96.9 ● 96.	13.9 mm

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⁵ Dimensional tolerance: +/-2 mm ⁶ In accordance with IEC 61215 Ed. 2 ⁷ According to the current warranty conditions of Astronergy Solarmodule GmbH