



# VIOLIN<sup>TM</sup> PREMIUM

## Crystalline PV Module ASM6610M Series

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

295    300    305    310

EN

### ELECTRICAL SPECIFICATIONS<sup>1</sup>

| STC <sup>2</sup> rated output (P <sub>max</sub> )     | 295 Wp   | 300 Wp   | 305 Wp   | 310 Wp   |
|---|----------|----------|----------|----------|
| Standard sorted output                                | -0/+3%   |          |          |          |
| Warranted power output STC (P <sub>nominal</sub> )    | 295 Wp   | 300 Wp   | 305 Wp   | 310 Wp   |
| Rated voltage (V <sub>mpp</sub> ) at STC              | 31.64 V  | 31.75 V  | 31.85 V  | 31.96 V  |
| Rated current (I <sub>mpp</sub> ) at STC              | 9.40 A   | 9.53 A   | 9.65 A   | 9.78 A   |
| Open circuit voltage (V <sub>oc</sub> ) at STC        | 39.14 V  | 39.50 V  | 39.86 V  | 40.23 V  |
| Short circuit current (I <sub>sc</sub> ) at STC       | 9.94 A   | 10.08 A  | 10.22 A  | 10.36 A  |
| Module efficiency                                     | 18.03%   | 18.34%   | 18.65%   | 18.95%   |
| Rated output (P <sub>mpp</sub> ) at NOCT <sup>3</sup> | 219.4 Wp | 223.1 Wp | 226.8 Wp | 230.6 Wp |
| Rated voltage (V <sub>mpp</sub> ) at NOCT             | 29.24 V  | 29.34 V  | 29.44 V  | 29.53 V  |
| Rated current (I <sub>mpp</sub> ) at NOCT             | 7.50 A   | 7.60 A   | 7.71 A   | 7.81 A   |
| Open circuit voltage (V <sub>oc</sub> ) at NOCT       | 36.34 V  | 36.68 V  | 37.02 V  | 37.35 V  |
| Short circuit current (I <sub>sc</sub> ) at NOCT      | 7.99 A   | 8.11 A   | 8.22 A   | 8.34 A   |

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

<sup>1</sup> Measuring uncertainty P<sub>mpp</sub>: +/-3 %; Tolerance for V<sub>oc</sub>, I<sub>sc</sub>, V<sub>mpp</sub> and I<sub>mpp</sub>: +/-10 %

<sup>2</sup> Standard test conditions that are defined as follows:

1.000 W/m<sup>2</sup> irradiation at a spectral density of AM 1.5 and a cell temperature of 25°C,

<sup>3</sup> Nominal operating temperature of the cell at 800 W/m<sup>2</sup> irradiation, 20°C ambient temperature, wind speed of 1 m/s

<sup>4</sup> Manufactured in an ISO9001/14001/50001 certified facility



## RELATED PARAMETERS

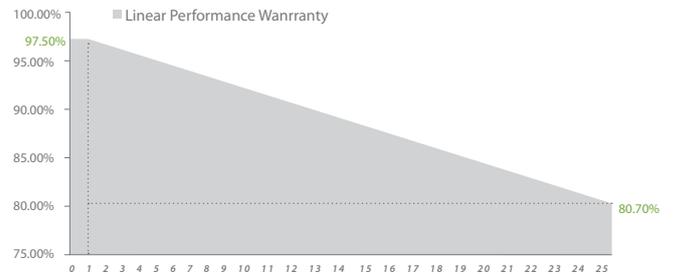
|                                    |   |
|------------------------------------|---|
| Cell type                          | Monocrystalline cell, 4-busbar technology |
| Number of cells / cell arrangement | 60 / 6 x 10                               |
| Cells dimension                    | 157 x 157 mm <sup>2</sup>                 |

## MECHANICAL SPECIFICATIONS

|   |                                 |
|---|---------------------------------|
| Outer dimensions (L x W x H) <sup>5</sup> | 1654 x 989 x 40 mm              |
| Frame technology                          | Aluminum, silver anodized       |
| Module composition                        | Glass / EVA / Backsheet (white) |
| 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 <sup>2</sup>               |
| Maximum load capacity <sup>6</sup>        | 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 <sup>7</sup> | 12 years                         |
| Performance warranty <sup>7</sup>      | 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 |
|-----------------------------------|-----------|-----------|---------------------|
|                                   |           |           |                     |
| © No mounting holes on the frame. |           |           |                     |

<sup>5</sup> Dimensional tolerance: +/-2 mm

<sup>6</sup> In accordance with IEC 61215 Ed. 2

<sup>7</sup> According to the current warranty conditions of Astronergy Solarmodule GmbH

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