

# PENTA

## Polycrystalline solar modules

### ASM6610P Series

- ▶ With innovative 5-busbar poly cell
- ▶ Improved reliability
- ▶ Increased efficiency through reduced series resistance
- ▶ Highly durable in different environments

255 260 265 270 275 280 EN

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

	255 Wp	260 Wp	265 Wp	270 Wp	275 Wp	280 Wp
STC <sup>2</sup> rated output (P <sub>mpp</sub> )*	255 Wp	260 Wp	265 Wp	270 Wp	275 Wp	280 Wp
Standard sorted output	-0/+3%					
Warranted power output STC (P <sub>nominal</sub> )	255 Wp	260 Wp	265 Wp	270 Wp	275 Wp	280 Wp
Rated voltage (V <sub>mpp</sub> ) at STC	30.30 V	30.53 V	30.75 V	30.98 V	31.20 V	31.43 V
Rated current (I <sub>mpp</sub> ) at STC	8.50 A	8.60 A	8.70 A	8.80 A	8.90 A	8.99 A
Open circuit voltage (V <sub>oc</sub> ) at STC	37.12 V	37.39 V	37.66 V	37.94 V	38.21 V	38.48 V
Short circuit current (I <sub>sc</sub> ) at STC	9.05 A	9.14 A	9.23 A	9.32 A	9.41 A	9.50 A
Module efficiency	15.6%	15.9%	16.2%	16.5%	16.8%	17.1%
Rated output (P <sub>mpp</sub> ) at NOCT <sup>3</sup>	190.5 Wp	194.1 Wp	197.8 Wp	201.5 Wp	205.3 Wp	209.1 Wp
Rated voltage (V <sub>mpp</sub> ) at NOCT	27.72 V	27.92 V	28.13 V	28.33 V	28.54 V	28.75 V
Rated current (I <sub>mpp</sub> ) at NOCT	6.87 A	6.95 A	7.03 A	7.11 A	7.19 A	7.27 A
Open circuit voltage (V <sub>oc</sub> ) at NOCT	34.16 V	34.41 V	34.66 V	34.92 V	35.17 V	35.42 V
Short circuit current (I <sub>sc</sub> ) at NOCT	7.31 A	7.38 A	7.45 A	7.53 A	7.60 A	7.67 A
Temperature coefficient (P <sub>mpp</sub> )	- 0.42 % / K		Maximum system voltage		1000 V <sub>dc</sub>	
Temperature coefficient (I <sub>sc</sub> )	+0.044 %/K		Number of diodes		3	
Temperature coefficient (V <sub>oc</sub> )	- 0.32 % / 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 ISO 9001/14001/50001 certified facility



## RELATED PARAMETERS

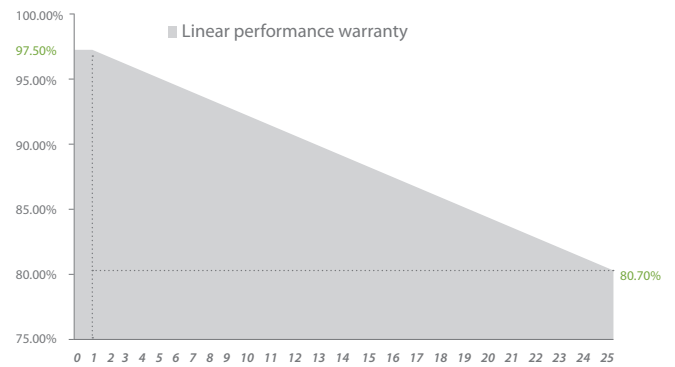
Cell type	Polycrystalline cell, 5-busbar technology
Number of cells / cell arrangement	60 / 6 x 10
Cells dimension	157 x 157 mm <sup>2</sup>

## 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 (incl. connector)
Cable diameter	4 mm <sup>2</sup>
Maximum load capacity <sup>6</sup>	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 <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
		<p>Frame without mounting wholes</p>	

<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

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