

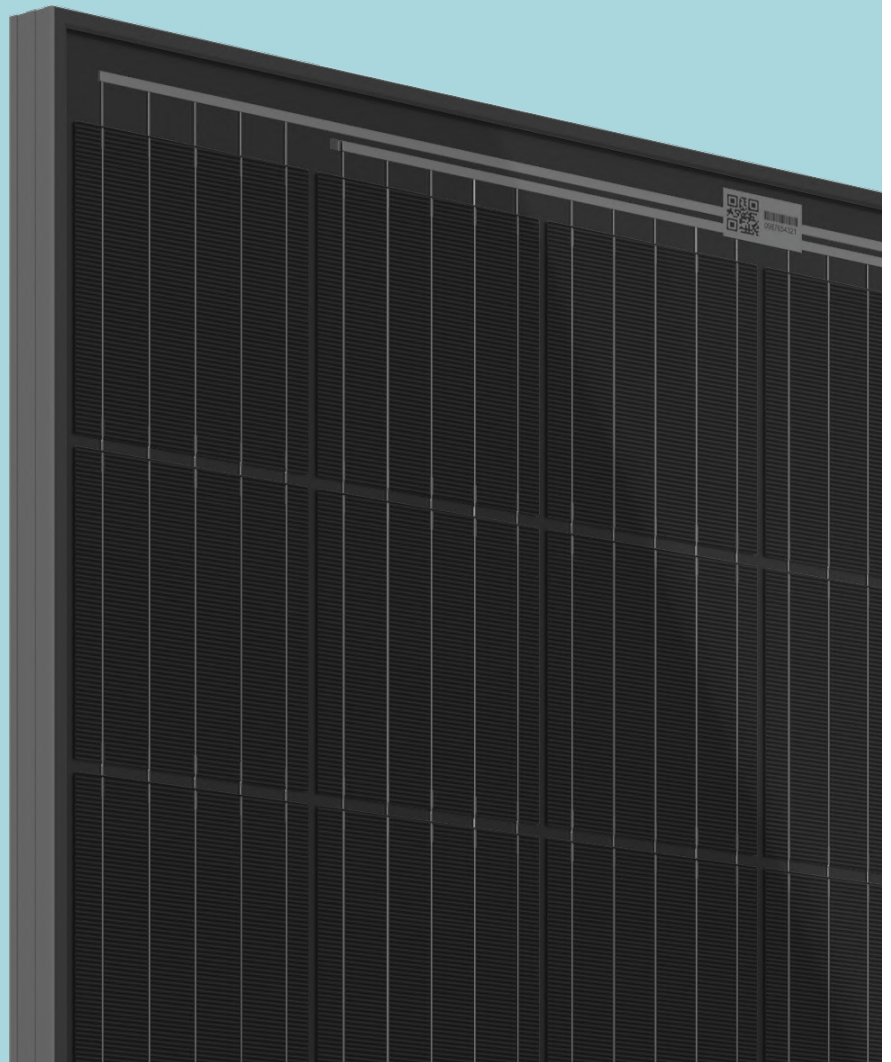
# X81 Premium

## 255 - 265 W

48 cells - connectable with our 60 cell module



 Made in  
**GERMANY**



### GERMAN ENGINEERING AND MANUFACTURING

Incorporated in 2001, aleo is recognized as one of the most trustworthy manufacturers of solar panels. We produce all our products in our certified production plant in Prenzlau, Germany.

### THE BEST GUARANTEE PACKAGE

 25 Years Product Guarantee       25 Years linear Performance Guarantee

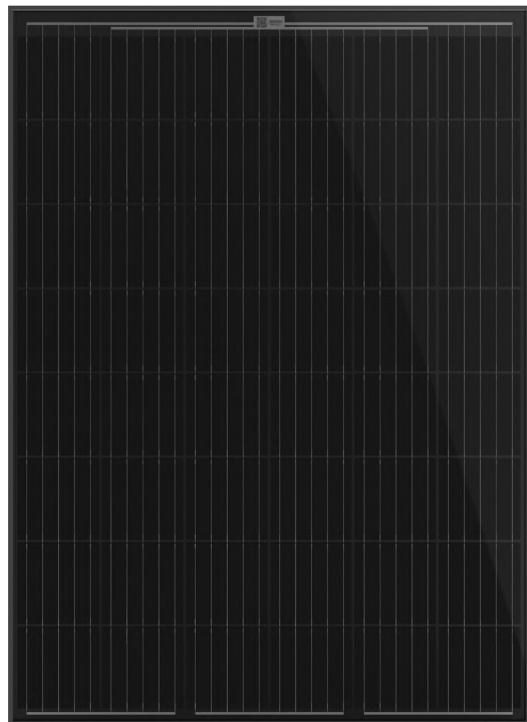
98% of nominal power guaranteed in the first two years

### OUR QUALITY IS CERTIFIED

This module is certified according to the latest international standards: **IEC 61215:2016** and **IEC 61730:2016**.

Additionally, this module obtained the following certificates:

- + Snail Trail Free
- + Salt mist corrosion resistance
- + Ammonia corrosion resistance
- + Sand and dust resistance
- + PID resistance
- + LeTID resistance
- + Hail resistance class 4
- + Pressure load: 8000 Pa - suction load: 5400 Pa
- + Dynamic mechanical load test



# aleo solar module X81 Premium

ELECTRICAL DATA (STC)		X81L255	X81L260	X81L265	BASIC MODULE DATA	
Rated power	$P_{MPP}$ [W]	255	260	265	Length x width x height	[mm] 1387 x 1023 x 42
Rated voltage	$V_{MPP}$ [V]	26.5	26.6	26.7	Weight	[kg] 16
Rated current	$I_{MPP}$ [A]	9.56	9.74	9.93	Number of cells	48
Open-circuit voltage	$V_{OC}$ [V]	32.4	32.5	32.6	Cell size	[mm] 158.75 x 158.75
Short-circuit current	$I_{SC}$ [A]	10.07	10.27	10.47	Cell material	Monocrystalline Si, PERC
Efficiency	$\eta$ [%]	18.0	18.3	18.7	Number of bus bars	5

Electrical values measured under standard test conditions (STC): 1000 W/m<sup>2</sup>; 25°C; AM 1.5

ELECTRICAL DATA (NMOT)		X81L255	X81L260	X81L265
Power	$P_{MPP}$ [W]	189	192	196
Voltage	$V_{MPP}$ [V]	24.6	24.7	24.7
Current	$I_{MPP}$ [A]	7.62	7.77	7.92
Open-circuit voltage	$V_{OC}$ [V]	30.3	30.4	30.5
Short-circuit current	$I_{SC}$ [A]	8.11	8.27	8.43
Efficiency	$\eta$ [%]	16.6	16.9	17.3

Electrical values measured under nominal module operating temperature: 800 W/m<sup>2</sup>; 20°C; AM 1.5; wind 1 m/s; Module temperature NMOT : 45.5°C

ELECTRICAL DATA (LOW IRRADIANCE)		X81L255	X81L260	X81L265
Power	$P_{MPP}$ [W]	50	51	52

Electrical values measured under: 200 W/m<sup>2</sup>; 25°C; AM 1.5

TEMPERATURE COEFFICIENTS			
Temperature coefficient $I_{SC}$	$\alpha (I_{SC})$	[%/K]	+0.05
Temperature coefficient $V_{OC}$	$\beta (V_{OC})$	[%/K]	-0.29
Temperature coefficient $P_{MPP}$	$\gamma (P_{MPP})$	[%/K]	-0.40

BASIC DATA JUNCTION BOX	
Length x width x height	[mm] 148 x 123 x 27
IP class	IP67
Cable length	[mm] 1200 (+), 800 (-)
Connectors	Genuine MC4
Bypass diodes	3

CLASSIFICATION	X81L255	X81L260	X81L265
Classification range (positive classification)	[W] 0/+4.99	0/+4.99	0/+4.99

## CERTIFICATIONS

Fire Resistance	Class C
Protection Against Electric Shock	II
IEC 61215:2016, IEC 61730:2016	
IEC 62716 – Ammonia Resistance	
IEC 61701 – Salt mist Resistance	
IEC 62804 – PID Resistance	
LeTID Resistance	
IEC/TS 62782:2016 - Dynamic mechanical load testing	
IEC 60068-2-68:1994 - Sand and Dust test	

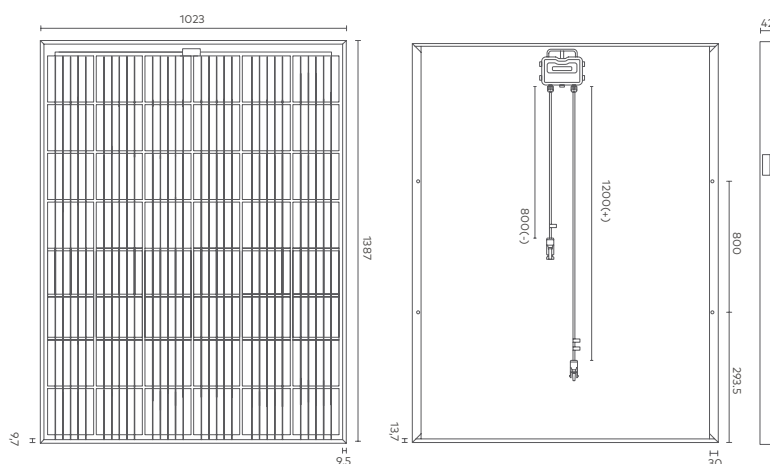
Hail resistance class 4 (40 mm hail stones)	
Snail trail free (AgNP Test)	

## LOADS

Max. module pressure load (Testload)	[Pa]	8000 <sup>1</sup>
Max. module pressure load (Designload) <sup>2</sup>	[Pa]	5333 <sup>1</sup>
Max. module suction load (Testload)	[Pa]	5400 <sup>1</sup>
Max. module suction load (Designload) <sup>2</sup>	[Pa]	3600 <sup>1</sup>
Max. system voltage	[V <sub>OC</sub> ]	1000
Reverse current load	$I_R$ [A]	20

Mechanical load acc. to IEC/EN 61215:2016  
<sup>1</sup> Please observe the mounting conditions in the installation manual  
<sup>2</sup> Testload/ Safety factor 1.5 = Designload  
 Measurement tolerance of  $P_{MPP}$  under STC -3/+3% |  
 Accuracy of other electrical values -10/+10%  
 Efficiency relating to gross module area

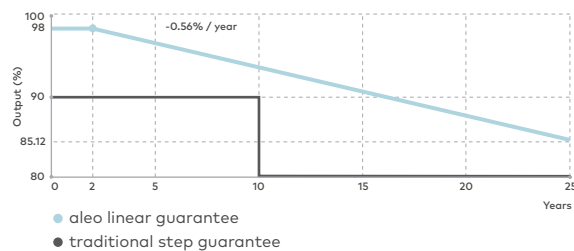
## DIMENSIONS [mm]



## GUARANTEES

Product Guarantee	25 years
Power Guarantee	25 years – Linear

## PERFORMANCE GUARANTEE



## PLEASE CONTACT YOUR AUTHORISED ALEO DEALER

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**aleo**