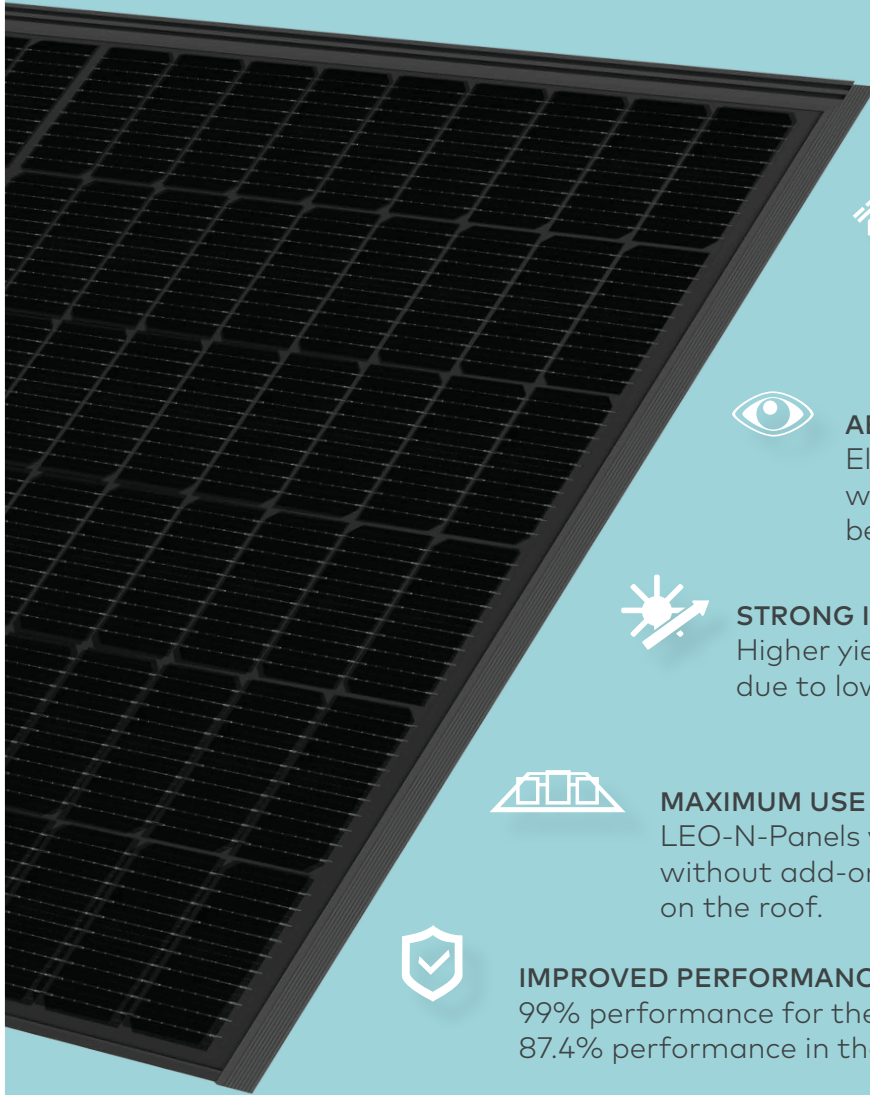


# LEO-N Sol 420-430 W

Premium PV Panel

The durable one.  
For a green planet.



**N-TYPE TOPCON CELL**  
Longer-lasting, more powerful & efficient.



## BIPV IN-ROOF SOLUTION

Solar building integration at the highest level. LEO-N Sol fits perfectly into your roof and replaces conventional roof tiles.



## AESTHETIC

Elegant black finish. Closes homogeneously with the roof surface. Blind modules for beautiful and uniform appearance available.



## STRONG IN HEAT

Higher yield at high temperatures due to low temperature coefficient.



## MAXIMUM USE OF SPACE

LEO-N-Panels with 108 & 96 cells can be combined without add-ons. For maximum energy generation on the roof.



## IMPROVED PERFORMANCE WARRANTY

99% performance for the first year, 87.4% performance in the 30th operational year.

## MADE IN GERMANY!

Right here. In Prenzlau. In our production facility. Here we manufacture under the aspects of quality & durability since 2001.

## FULL SERENITY



Years linear  
**Power Guarantee**



Years  
**Product Guarantee**

100% cost recovery of guarantee claims.

Under the terms and conditions of the respective guarantee certificate.

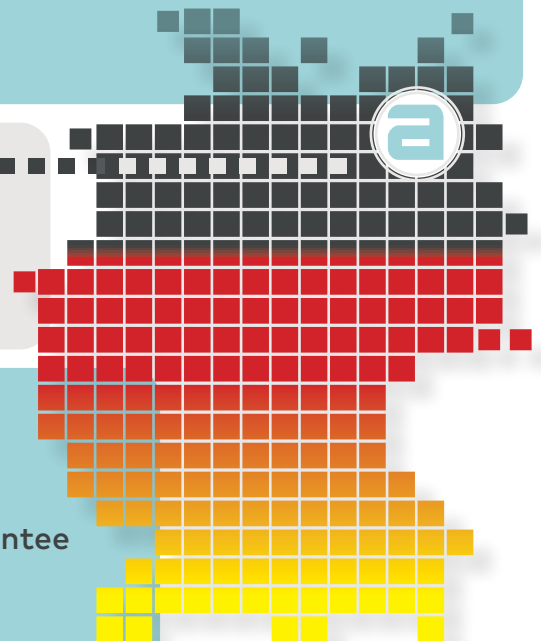
QUALITY UNDER HAND AND SEAL



Design optimized with

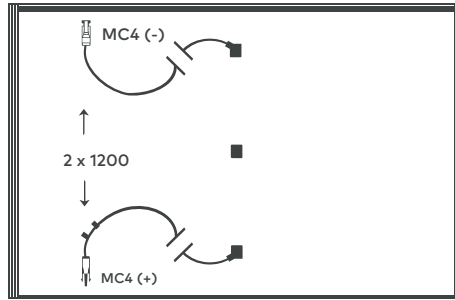
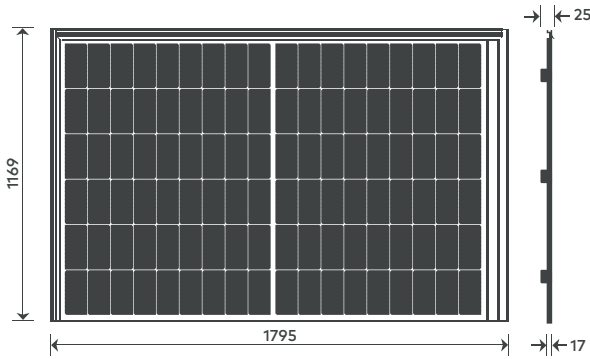
SmartCalc.Module

**aleo**  
www.aleo-solar.com



# aleo solar panel LEO-N Sol 420-430 W Premium

## DIMENSIONS [MM]



The frames of side-by-side modules interlock on the left and right sides. For more information, please refer to the installation manual.

**grid dimensions: 1137 mm x 1777 mm**  
Please refer to the planning help on the website [www.aleo-solar.com](http://www.aleo-solar.com)

## BASIC MODULE DATA

Length x width x height	1169 x 1795 x 17 (with junction box 25) (grid dimension 1137 x 1777)		
Weight	[kg]	22	
Number of cells		108	
Cell size	[mm]	182 x 91	
Cell material		Monocrystalline Si, n-type TOPCon	
Number of Busbars		10	
Front sheet		3.2 mm Solar glass (TSG) with anti-reflective coating	
Back sheet		Polymer sheet, black	
Frame material		Al alloy, black, powder coated	

## BASIC DATA JUNCTION BOX

3 parts junction box acc. to IEC 62790	[mm]	left & right: 62 x 58 x 14 middle: 49 x 55 x 14
Bypass diodes		3 (one per box)
IP class		IP68
Cable	[mm]	1200 (+), 1200 (-) acc. to EN 50618
Connectors		genuine MC4 acc. to EN 62852

## CLASSIFICATION

Classification range (positive classification)	[W]	0/+4.99
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## LOADS

Max. module pressure load (Testload)	[Pa]	5400 <sup>1</sup>
Max. module pressure load (Designload) <sup>2</sup>	[Pa]	3600 <sup>1</sup>
Max. module suction load (Testload)	[Pa]	2400 <sup>1</sup>
Max. module suction load (Designload) <sup>2</sup>	[Pa]	1600 <sup>1</sup>
Max. system voltage	[V <sub>DC</sub> ]	1000
Reverse current load	I <sub>R</sub> [A]	25

Mechanical load acc. to IEC/EN 61215:2021

<sup>1</sup> Please observe the mounting conditions in the installation manual

<sup>2</sup> Testload/Safety factor 1.5 = Designload

## ELECTRICAL DATA (STC)

		S84T420	S84T425	S84T430
Rated power	P <sub>MPP</sub> [W]	420	425	430
Rated voltage	V <sub>MPP</sub> [V]	33.52	33.71	33.89
Rated current	I <sub>MPP</sub> [A]	12.53	12.61	12.69
Open-circuit voltage	V <sub>OC</sub> [V]	39.19	39.38	39.57
Short-circuit current	I <sub>SC</sub> [A]	13.19	13.27	13.35
Efficiency (after installation) <sup>3</sup>	h [%]	20.8	21.0	21.3
Efficiency (before installation) <sup>4</sup>	h [%]	20.0	20.3	20.5

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

## ELECTRICAL DATA (LOW IRRADIANCE)

		S84T420	S84T425	S84T430
Power	P <sub>MPP</sub> [W]	84	85	86

Electrical values measured under: 200 W/m<sup>2</sup>; 25 °C; AM 1.5  
Measurement tolerance of P<sub>MPP</sub> under STC -3/+3 %  
Accuracy of other electrical values -10/+10 %  
<sup>3</sup> Efficiency related to grid dimension /<sup>4</sup> Efficiency related to gross module area

## CERTIFICATIONS - IN PROCESS

Fire Resistance Class C (IEC 61730), E (EN 13501-1), B2 (DIN 4102-1)

Protection Against Electric Shock II

General Building Supervision Test Report against flying sparks and radiant heat (hard roofing) acc. DIN CEN/TS 1187-1; B<sub>ROOF</sub> (t1) acc. DIN EN 13501-5

IEC 61215:2021, IEC 61730:2023 including:

- IEC 62804 - PID Resistance

- IEC/TS 62782:2016 - Dynamic mechanical load testing

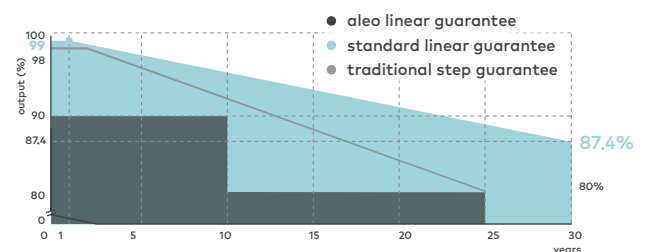
Snail trail free (AgNP Test) (in Bearbeitung)

System Certifications acc. to DIN EN ISO 9001:2015, 14001:2015, 50001:2018 and DIN ISO 45001:2018

## GUARANTEES

Product Guarantee	30 years
Power Guarantee	30 years - linear

## PERFORMANCE GUARANTEE



PLEASE CONTACT YOUR AUTHORISED ALEO DEALER

## ALEO SOLAR GMBH

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GERMANY

## CONTACT

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# aleo