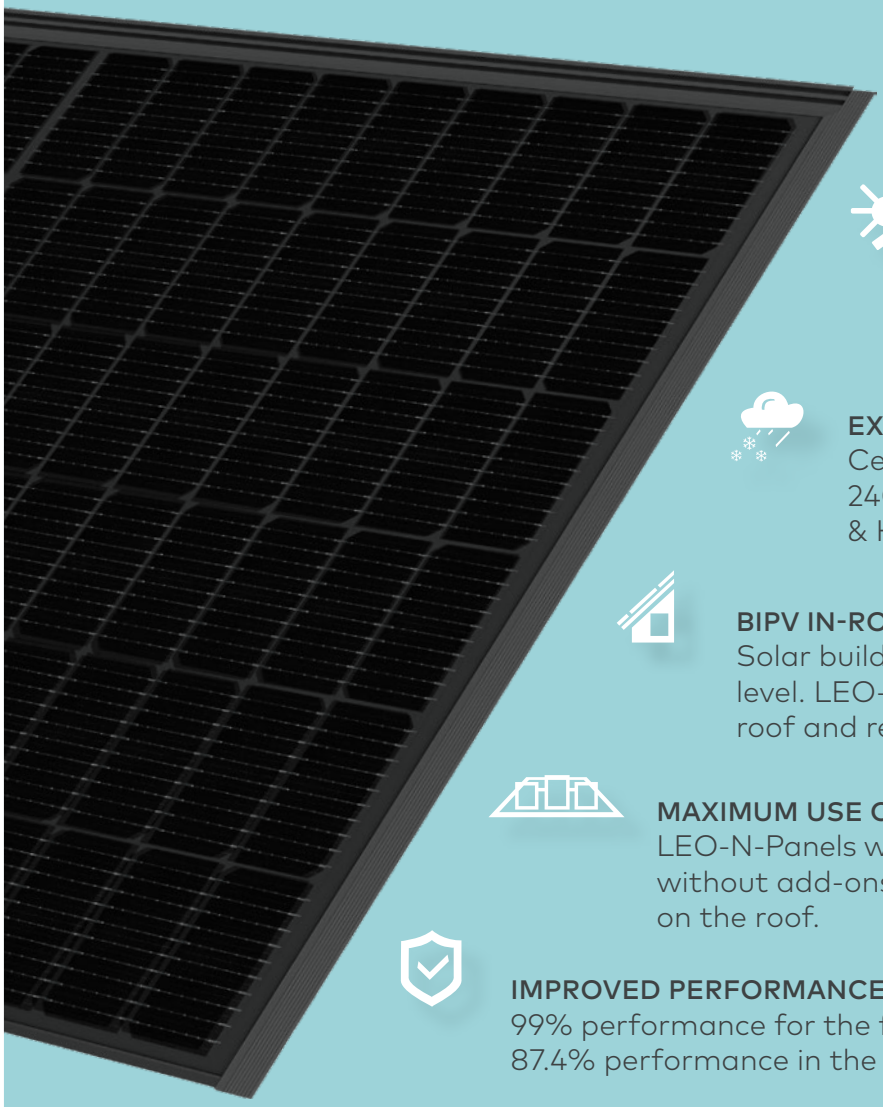
LEO-N Sol 420-430 W

Premium PV Panel

The durable one.
For a green planet.



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

STRONG IN HEAT
Higher yield at high temperatures due to low temperature coefficient.

EXTREMELY WEATHER RESISTANT
Certified for 8100 Pa snow load & 2400 Pa wind load & 40 mm hailstones & Hail Class 3.

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

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

30 Years linear **Power Guarantee**

30 Years **Product Guarentee**

100% cost recovery of guarantee claims.
Under the terms and conditions of the respective guarantee certificate.

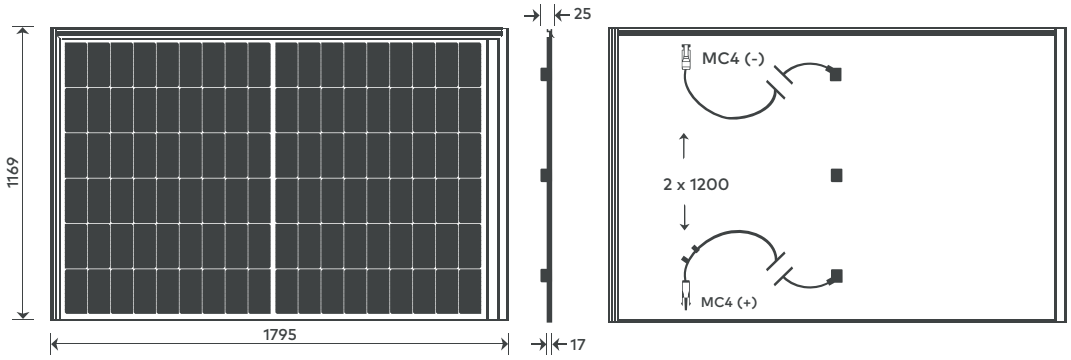
QUALITY UNDER HAND AND SEAL

Design optimized with SmartCalc.Module

aleo
www.aleo-solar.com

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

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 1777mm
Please refer to the planning help on the website 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

ELECTRICAL DATA (STC)

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

Electrical values measured under standard test conditions (STC): 1000 W/m²; 25 °C; AM 1.5

ELECTRICAL DATA (LOW IRRADIANCE)

			S84T420	S84T425	S84T430
Power	P_{MPP}	[W]	84	85	86

Electrical values measured under: 200 W/m²; 25 °C; AM 1.5
Measurement tolerance of P_{MPP} under STC -3/+3 %
Accuracy of other electrical values -10/+10 %
[3] Efficiency related to grid dimension /[4] Efficiency related to gross module area

LOADS

Max. module pressure load (Testload)		[Pa]	8100[1]
Max. module pressure load (Designload)2		[Pa]	5400[1]
Max. module suction load (Testload)		[Pa]	2400[1]
Max. module suction load (Designload)[2]		[Pa]	1600[1]
Max. system voltage		[V_{DC}]	1000
Reverse current load	I_R	[A]	25

Mechanical load acc. to IEC/EN 61215:2021
[1] Please observe the mounting conditions in the installation manual
[2] Testload/Safety factor 1.5 = Designload

TEMPERATURE COEFFICIENTS

Temperature coefficient I_{SC}	α (I_{SC})	[%/K]	+0.029
Temperature coefficient V_{OC}	ß (V_{OC})	[%/K]	-0.24
Temperature coefficient P_{MPP}	Y (P_{MPP})	[%/K]	-0.31

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_{ROOF} (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

LeTID Resistance

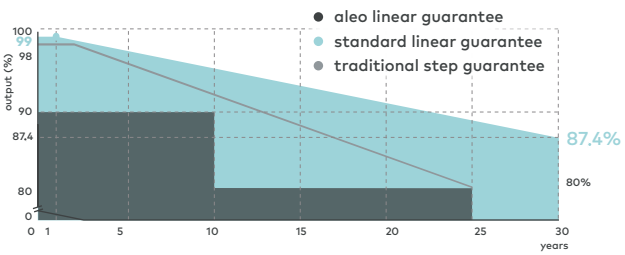
Snail trail free (AgNP Test)

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

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