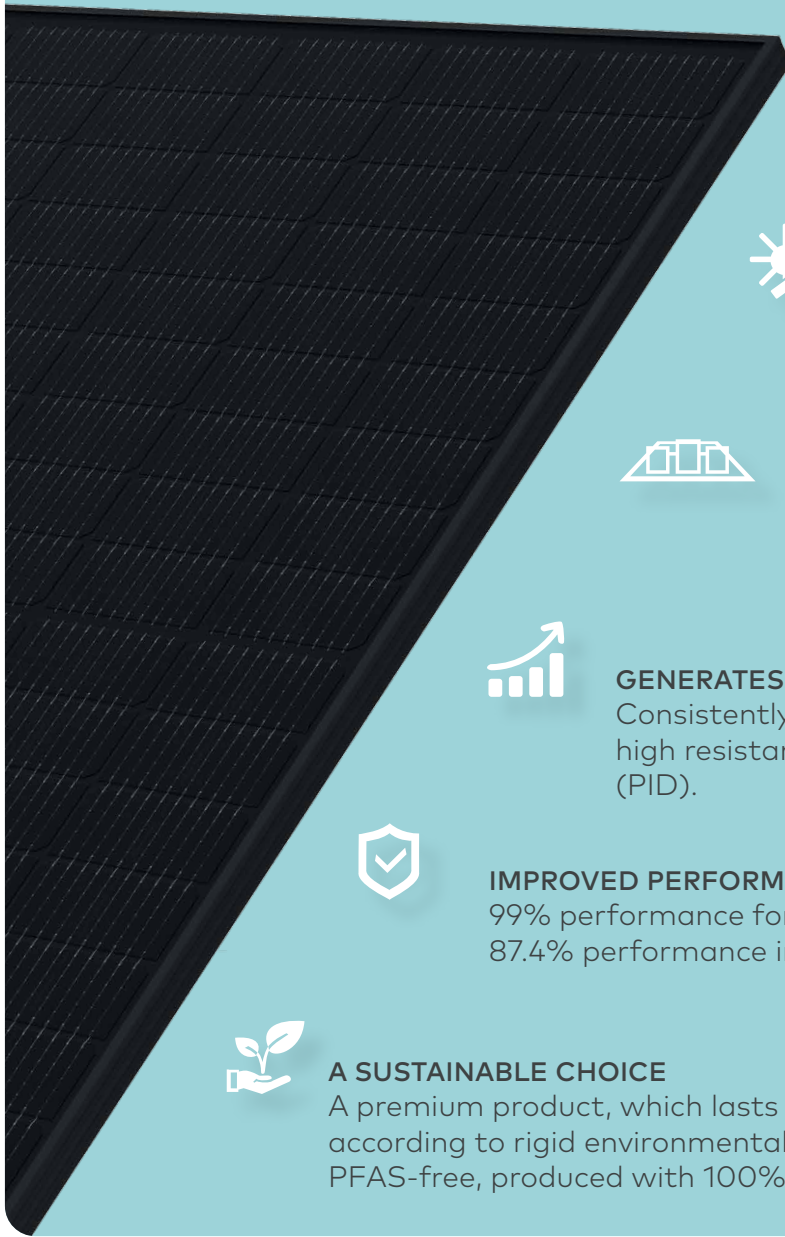


LEO-N Black 420-430 W

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.



MAXIMUM USE OF SPACE

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



GENERATES MORE ELECTRICITY

Consistently high performance thanks to high resistance to performance degradation (PID).



IMPROVED PERFORMANCE WARRANTY

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



A SUSTAINABLE CHOICE

A premium product, which lasts for decades. Manufactured according to rigid environmental standards. PFAS-free, produced with 100% green electricity.

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 Guarantee

100% cost recovery of guarantee claims.

Under the terms and conditions of the respective guarantee certificate.

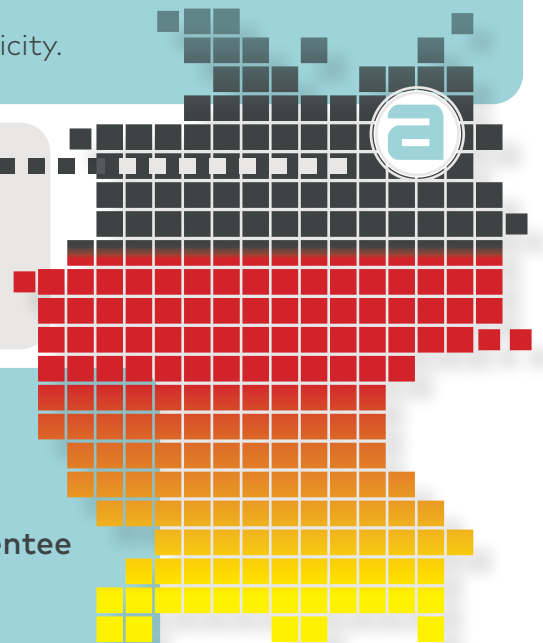
QUALITY UNDER HAND AND SEAL



Design optimized with

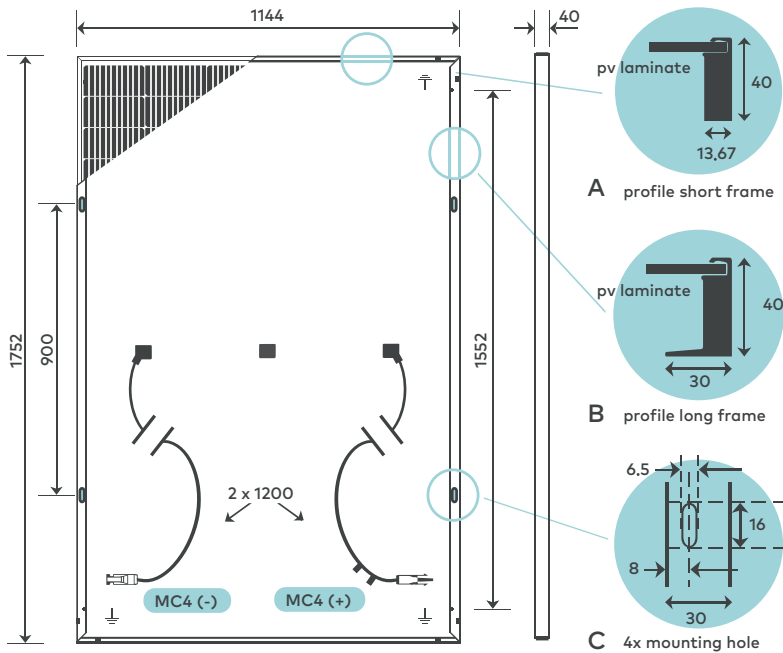
SmartCalc.Module

aleo
www.aleo-solar.com



aleo solar panel LEO-N Black 420-430 W Premium

DIMENSIONS [MM]



BASIC MODULE DATA

Length x width x height	[mm]	1752 x 1144 x 40
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, white
Frame material		Al alloy, black

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

ELECTRICAL DATA (STC)

	L84S420	L84S425	L84S430	
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	η [%]	21.0	21.2	21.5

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

ELECTRICAL DATA (LOW IRRADIANCE)

	L84S420	L84S425	L84S430	
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 %

Efficiency relating to gross module area

CLASSIFICATION

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

CERTIFICATIONS

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

Protection Against Electric Shock II

IEC 61215:2021, IEC 61730:2023 including:

- IEC 62804 – PID Resistance

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

IEC 62716 – Ammonia Resistance

IEC 61701 – Salt mist Resistance

IEC 60068-2-68:1994 - Sand- and Dust test (in process)

Hail resistance class 4 (40 mm hailstones)

Snail trail free (AgNP Test) (in process)

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

LOADS

Max. module pressure load (Testload)	[Pa]	5400 ¹
Max. module pressure load (Designload) ²	[Pa]	3600 ¹
Max. module suction load (Testload)	[Pa]	2400 ¹
Max. module suction load (Designload) ²	[Pa]	1600 ¹
Max. system voltage	[V _{oc}]	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

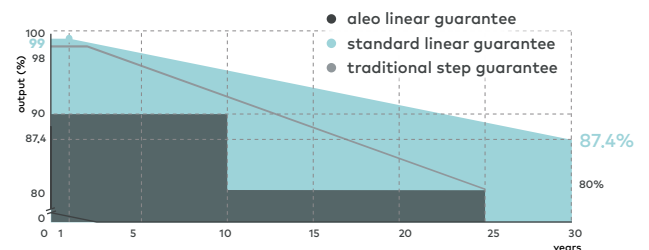
TEMPERATURE COEFFICIENTS

Temperature coefficient I_{SC}	$\alpha (I_{SC})$	[%/K]	+0.029
Temperature coefficient V_{OC}	$\beta (V_{OC})$	[%/K]	-0.24
Temperature coefficient P_{MPP}	$\gamma (P_{MPP})$	[%/K]	-0.31

GUARANTEES

Product Guarantee	30 years
Power Guarantee	30 years – linear

PERFORMANCE GUARANTEE



PLEASE CONTACT YOUR AUTHORISED ALEO DEALER

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