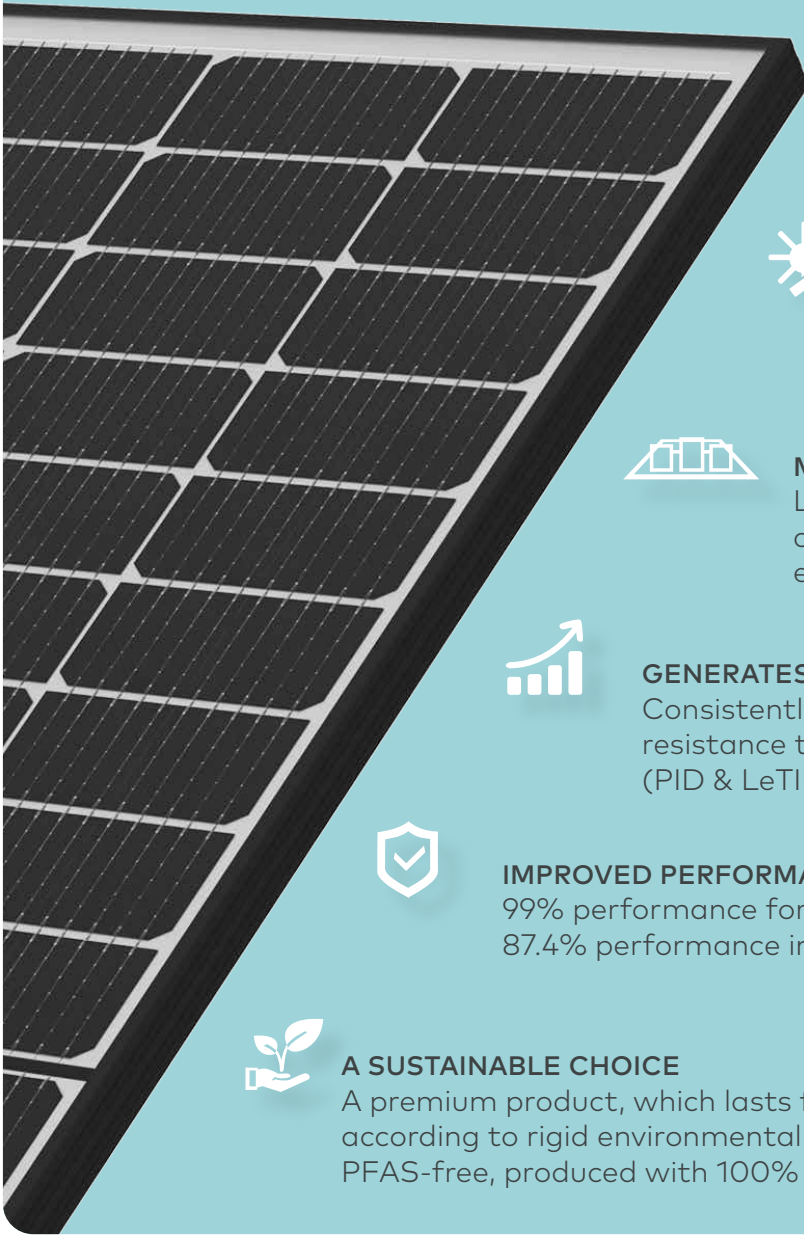


# LEO-N 430-440 W

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 & LeTID).



**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.

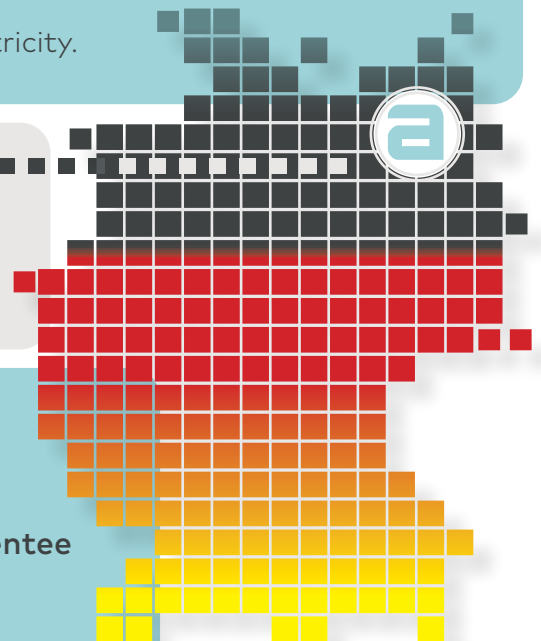
QUALITY UNDER HAND AND SEAL



Design optimized with

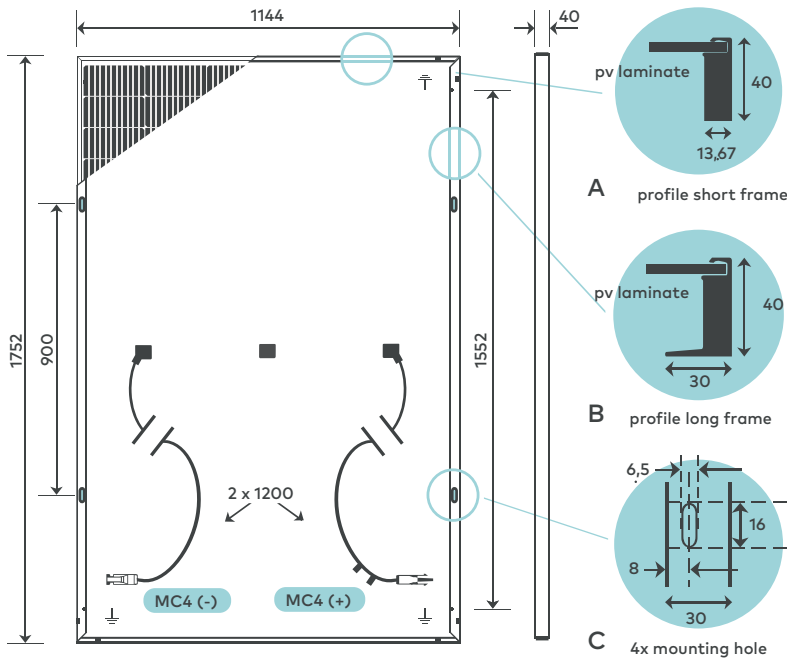
SmartCalc.Module

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



# aleo solar panel LEO-N 430-440 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)

	L64S430	L64S435	L64S440	
Rated power	$P_{MPP}$ [W]	430	435	440
Rated voltage	$V_{MPP}$ [V]	33.20	33.38	33.56
Rated current	$I_{MPP}$ [A]	12.95	13.03	13.11
Open-circuit voltage	$V_{OC}$ [V]	39.22	39.41	39.60
Short-circuit current	$I_{SC}$ [A]	13.63	13.71	13.79
Efficiency	$\eta$ [%]	21.5	21.7	22.0

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

## ELECTRICAL DATA (LOW IRRADIANCE)

	L64S430	L64S435	L64S440	
Power	$P_{MPP}$ [W]	86	87	88

Electrical values measured under: 200 W/m<sup>2</sup>; 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) (in process)

Snail trail free (AgNP Test)

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 <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>oc</sub> ]	1000
Reverse current load	$I_R$ [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

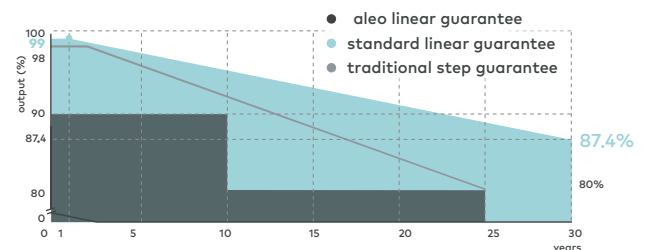
## TEMPERATURE COEFFICIENTS

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

## ALEO SOLAR GMBH

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GERMANY

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# aleo