# LEO Black 380-395 W

Premium PV Panel

# The durable one. For a green planet.

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#### ELEGANT BLACK ROOF

Thanks to covered cross-connectors and improved cell connector optics, LEO Black is darker and looks more homogeneous.

#### GENERATE MORE POWER

Shows an extremely high resistance to degradation phenomena (PID & LeTID).

#### EXTREMELY WEATHER RESISTANT

Certified to withstand 8100 Pa Snowload & 3600 Pa Windload & 40 mm Hailstones (Hail-Class 4).

#### POWERFUL IN ALL ENVIRONMENTS

Certified to perform in coastal areas (salt-mist), deserts (dust) and farmland (ammonia).

# MAXIMUM USE OF SPACE

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

#### A SUSTAINABLE CHOICE

A premium product, which lasts for decades. Manufactured according to rigid environmental standards. 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**



Years linear
Power Guarantee



Years **Product Warranty** 

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

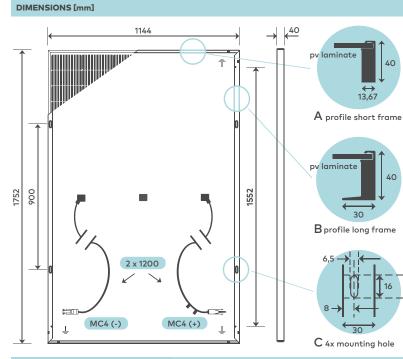
aleo

QUALITY UNDER HAND AND SEAL

www.aleo-solar.com



# aleo solar panel LEO Black 380-395 W Premium



ELECTRICAL DATA (ST	c)		L84S380	L84S385	L84S390	L84S395
Rated power	P <sub>MPP</sub>	[W]	380	385	390	395
Rated voltage	$V_{MPP}$	[V]	31.02	30.21	31.40	31.60
Rated current	I <sub>mpp</sub>	[A]	12.26	12.34	12.42	12.50
Open-circuit voltage	V <sub>oc</sub>	[V]	36.93	37.05	37.17	37.29
Short-circuit current	I <sub>sc</sub>	[A]	12.85	12.94	13.02	13.10
Efficiency	$\eta$	[%]	19.0	19.2	19.5	19.7
				. (670) 40	0014/ 3 05 00	

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

ELECTRICAL DATA (LOW	IRRADIA	NCE)	L84S380	L84S385	L84S390	L84S395
Power	P <sub>MPP</sub>	[W]	73	74	75	76
Electrical values measured Measurement tolerance o Accuracy of other electric Efficiency related to gross	f P <sub>MPP</sub> und al values	der STC - -10/+10 °	-3/+3 %	1.5		
CLASSIFICATION						
Classification range (posi	tive class	ification)	) [W]		0/+4.99	
CERTIFICATIONS						
Fire Resistance		Class	s C			
Protection Against Electri	c Shock	П				
IEC 61215:2021, IEC 61730:2016 including:						
- IEC 62804 – PID Resis	tance					
- IEC/TS 62782:2016 -	Dynamic	: mechan	nical load tes	ting		
IEC 62716 – Ammonia Resis	tance					
LeTID Resistance						
IEC 61701 – Salt mist Resist	ance					

IEC 60068-2-68:1994 - Sand- and Dust test

Hail resistance class 4 (40 mm hailstones)

Snail trail free (AgNP Test)

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

#### 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, PERC
Number of Busbars		10
Front sheet		3.2 mm Solar glass (TSG)
Back sheet		Polymer sheet, black
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

LOADS			
Max. module pressure load (Testload)		[Pa]	8100 <sup>1</sup>
Max. module pressure load (Designload) <sup>2</sup>		[Pa]	5400 <sup>1</sup>
Max. module suction load (Testload)		[Pa]	3600 <sup>1</sup>
Max. module suction load (Designload) <sup>2</sup>		[Pa]	2400 <sup>1</sup>
Max. system voltage		$[V_{DC}]$	1000
Reverse current load	I <sub>R</sub>	[A]	25

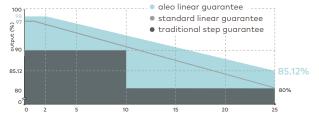
Mechanical load acc. to IEC/EN 61215:2021 <sup>1</sup> Please observe the mounting conditions in the installation manual <sup>2</sup> Tectlood/Safety factor 15 - Designland

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TEMPERATURE COEFFICIENTS			
Temperature coefficient I <sub>sc</sub>	$\alpha (l_{sc})$	[%/K]	+0.03
Temperature coefficient V <sub>oc</sub>	$\beta$ (V <sub>oc</sub> )	[%/K]	-0.26
Temperature coefficient P <sub>MPP</sub>	Y (P <sub>MPP</sub> )	[%/K]	-0.34

GUARANTEES	
Product Guarantee	25 years
Power Guarantee	25 years – Linear

#### PERFORMANCE GUARANTEE



**ALEO SOLAR GMBH** 

#### CONTACT

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PLEASE CONTACT YOUR AUTHORISED ALEO DEALER

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