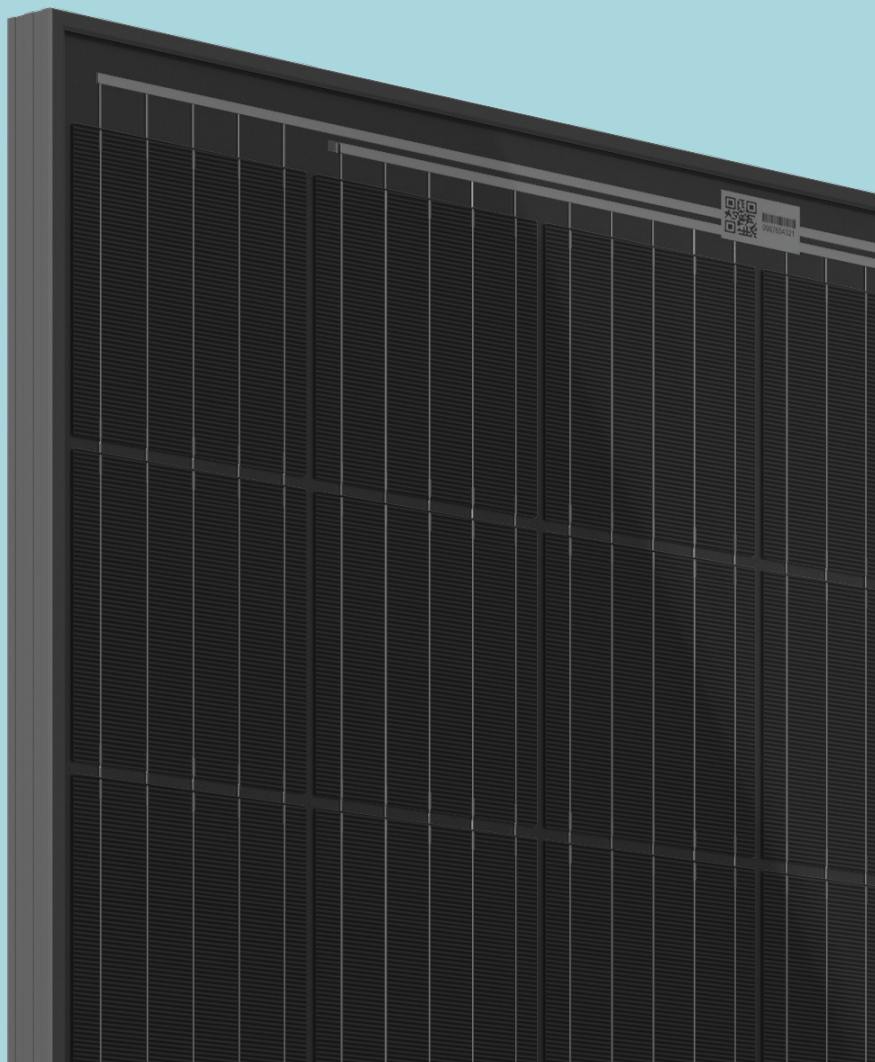


# X83 Premium

## 320 - 330 W



 Made in  
**GERMANY**



### GERMAN ENGINEERING AND MANUFACTURING

Incorporated in 2001, aleo is recognized as one of the most trustworthy manufacturers of solar panels. We produce all our products in our certified production plant in Prenzlau, Germany.

### THE BEST GUARANTEE PACKAGE

 25 Years Product Guarantee       25 Years linear Performance Guarantee

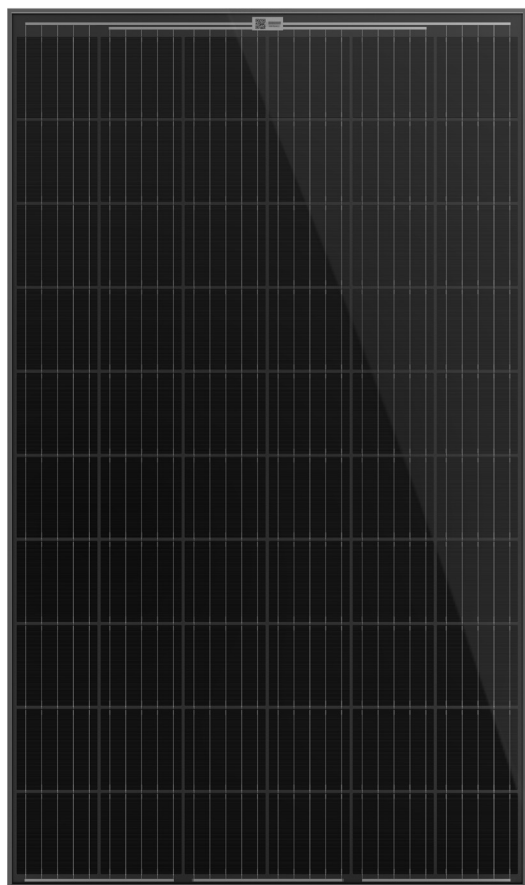
98% of nominal power guaranteed in the first two years

### OUR QUALITY IS CERTIFIED

This module is certified according to the latest international standards: **IEC 61215:2016** and **IEC 61730:2016**.

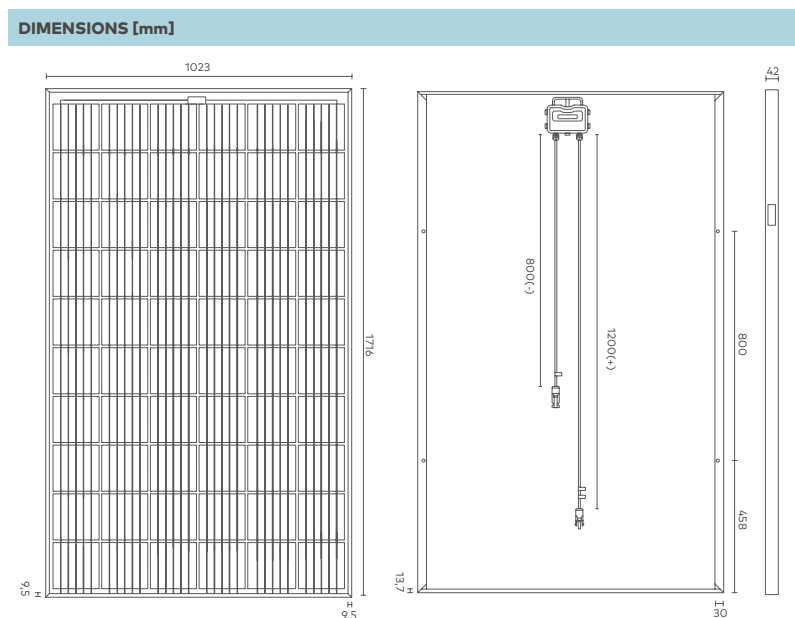
Additionally, this module obtained the following certificates:

- + Snail Trail Free
- + Salt mist corrosion resistance
- + Ammonia corrosion resistance
- + Sand and dust resistance
- + PID resistance
- + LeTID resistance
- + Hail resistance class 4
- + Pressure load: 8000 Pa - suction load: 5400 Pa
- + Dynamic mechanical load test



# aleo solar module X83 Premium

ELECTRICAL DATA (STC)		X83L320	X83L325	X83L330	BASIC MODULE DATA	
Rated power	$P_{MPP}$ [W]	320	325	330	Length x width x height	[mm] 1716 x 1023 x 42
Rated voltage	$V_{MPP}$ [V]	32.6	32.8	33.1	Weight	[kg] 19.5
Rated current	$I_{MPP}$ [A]	9.81	9.90	9.97	Number of cells	60
Open-circuit voltage	$V_{OC}$ [V]	40.3	40.5	40.6	Cell size	[mm] 158.75 x 158.75
Short-circuit current	$I_{SC}$ [A]	10.32	10.40	10.49	Cell material	Monocrystalline Si, PERC
Efficiency	$\eta$ [%]	18.2	18.5	18.8	Number of bus bars	5
Electrical values measured under standard test conditions (STC): 1000 W/m <sup>2</sup> ; 25°C; AM 1.5						
ELECTRICAL DATA (NMOT)		X83L320	X83L325	X83L330	CERTIFICATIONS	
Power	$P_{MPP}$ [W]	236	240	244	Fire Resistance	Class C
Voltage	$V_{MPP}$ [V]	30.2	30.4	30.7	Protection Against Electric Shock	II
Current	$I_{MPP}$ [A]	7.82	7.90	7.95	IEC 61215:2016, IEC 61730:2016	
Open-circuit voltage	$V_{OC}$ [V]	37.7	37.9	38.0	IEC 62716 – Ammonia Resistance	
Short-circuit current	$I_{SC}$ [A]	8.31	8.38	8.45	IEC 61701 – Salt mist Resistance	
Efficiency	$\eta$ [%]	16.8	17.1	17.4	IEC 62804 – PID Resistance	
Electrical values measured under nominal module operating temperature: 800 W/m <sup>2</sup> ; 20°C; AM 1.5; wind 1 m/s; Module temperature NMOT : 45.5°C						
ELECTRICAL DATA (LOW IRRADIANCE)		X83L320	X83L325	X83L330	LOADS	
Power	$P_{MPP}$ [W]	62	63	64	Max. module pressure load (Testload)	[Pa] 8000 <sup>1</sup>
Electrical values measured under: 200 W/m <sup>2</sup> ; 25°C; AM 1.5						
TEMPERATURE COEFFICIENTS						
Temperature coefficient $I_{SC}$	$\alpha (I_{SC})$	[%/K]	+0.05		Max. module pressure load (Designload) <sup>2</sup>	[Pa] 5333 <sup>1</sup>
Temperature coefficient $V_{OC}$	$\beta (V_{OC})$	[%/K]	-0.29		Max. module suction load (Testload)	[Pa] 5400 <sup>1</sup>
Temperature coefficient $P_{MPP}$	$\gamma (P_{MPP})$	[%/K]	-0.40		Max. module suction load (Designload) <sup>2</sup>	[Pa] 3600 <sup>1</sup>
BASIC DATA JUNCTION BOX						
Length x width x height	[mm]	148 x 123 x 27				
IP class		IP67				
Cable length	[mm]	1200 (+), 800 (-)				
Connectors		Genuine MC4				
Bypass diodes		3				
CLASSIFICATION		X83L320	X83L325	X83L330		
Classification range (positive classification)	[W]	0/+4.99	0/+4.99	0/+2.99	Max. system voltage	[V <sub>OC</sub> ] 1000
					Reverse current load	$I_R$ [A] 20



**GUARANTEES**

Product Guarantee 25 years  
Power Guarantee 25 years – Linear

**PERFORMANCE GUARANTEE**

PLEASE CONTACT YOUR AUTHORISED ALEO DEALER

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**aleo**