

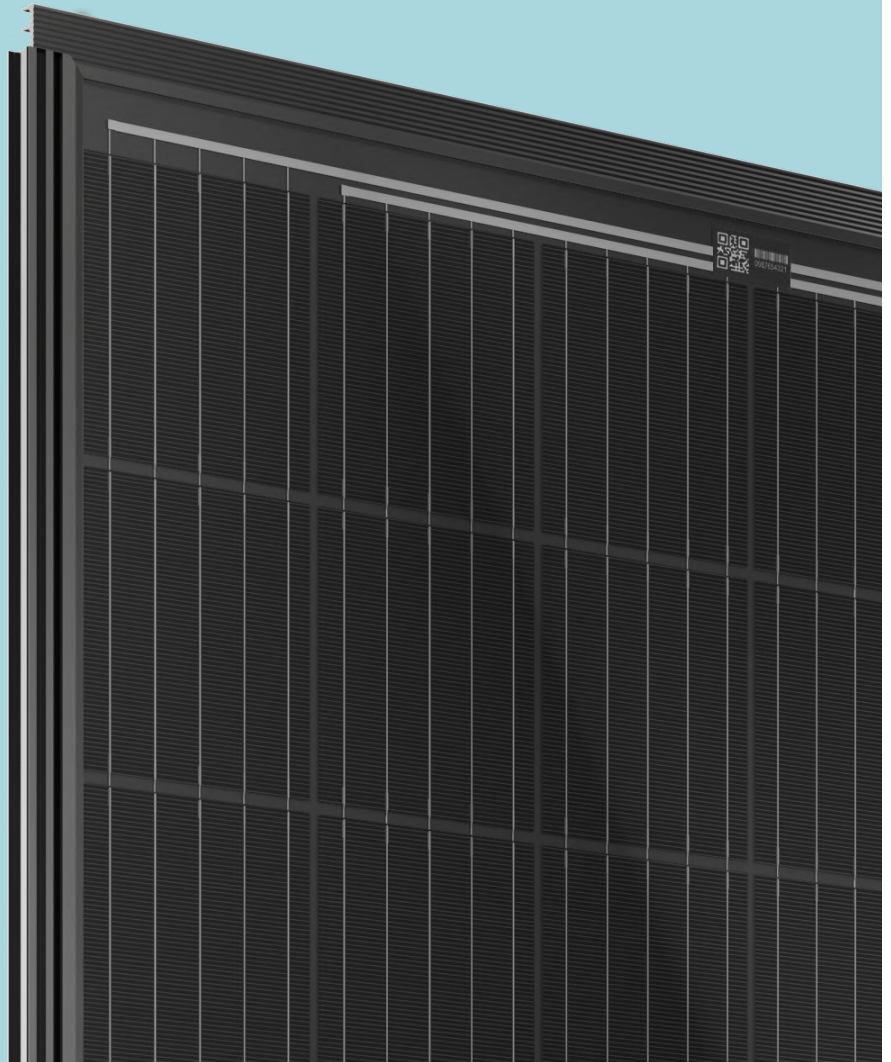
# S83 sol Premium

## 320 - 330W

60 cells - connectable with our 48 cell module



 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

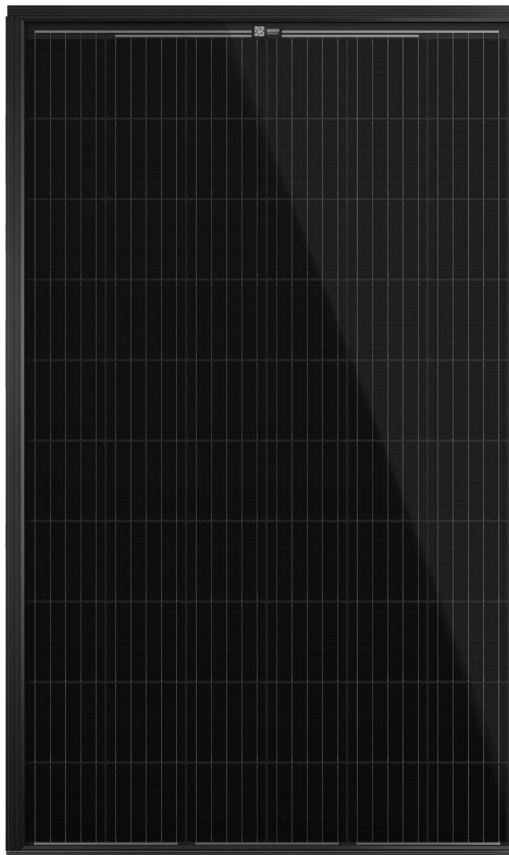
98% of nominal power guaranteed in the first two years

### SOLRIF IN-ROOF MODULE

- + Complete package with flashing
- + Replaces the conventional roof covering
- + As weather-tight as a traditionally tiled roof
- + Higher surface yield due to narrow frame profiles
- + With aleo blind modules, full roof coverage is possible

### OUR QUALITY IS CERTIFIED

- + IEC 61215:2016 and IEC 61730:2016
- + General Building Supervision Test Report against flying sparks and radiant heat (hard roofing)
- + PID resistance
- + LeTID resistance
- + Dynamic mechanical load test
- + Snail Trail Free



# aleo solar module S83 sol Premium

ELECTRICAL DATA (STC)		S83T320	S83T325	S83T330
Rated power	$P_{MPP}$ [W]	320	325	330
Rated voltage	$V_{MPP}$ [V]	32.6	32.8	33.1
Rated current	$I_{MPP}$ [A]	9.81	9.90	9.97
Open-circuit voltage	$V_{OC}$ [V]	40.3	40.5	40.6
Short-circuit current	$I_{SC}$ [A]	10.32	10.40	10.49
Efficiency	$\eta$ [%]	17.4	17.6	17.9

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

ELECTRICAL DATA (NMOT)		S83T320	S83T325	S83T330
Power	$P_{MPP}$ [W]	236	240	244
Voltage	$V_{MPP}$ [V]	30.2	30.4	30.7
Current	$I_{MPP}$ [A]	7.82	7.90	7.95
Open-circuit voltage	$V_{OC}$ [V]	37.7	37.9	38.0
Short-circuit current	$I_{SC}$ [A]	8.31	8.38	8.45
Efficiency	$\eta$ [%]	16.0	16.3	16.5

Electrical values measured under nominal operating conditions of cells: 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)		S83T320	S83T325	S83T330
Power	$P_{MPP}$ [W]	62	63	64

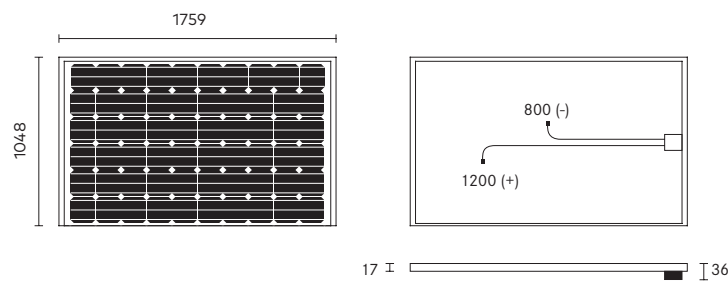
Electrical values measured under: 200 W/m<sup>2</sup>; 25°C; AM 1,5

TEMPERATURE COEFFICIENTS			
Temperature coefficient $I_{SC}$	$\alpha (I_{SC})$	[%/K]	+0.05
Temperature coefficient $V_{OC}$	$\beta (V_{OC})$	[%/K]	-0.29
Temperature coefficient $P_{MPP}$	$\gamma (P_{MPP})$	[%/K]	-0.40

BASIC DATA JUNCTION BOX			
Length x width x height	[mm]	148 x 123 x 27	
IP class		IP67	
Cable length	[mm]	1200 (+), 800 (-)	
Connectors		MC4	
Bypass diodes		3	

CLASSIFICATION		S83T320	S83T325	S83T330
Classification range (positive classification)	[W]	0/+4.99	0/+4.99	0/+2.99

## DIMENSIONS [mm]



BASIC MODULE DATA		
Length x width x height	[mm]	1048 x 1759 x 36 (grid dimension 1016 x 1741)
Weight	[kg]	19,5
Number of cells		60
Cell size	[mm]	158.75 x 158.75
Cell material		Monocrystalline Si, PERC
Number of bus bars		5
Front sheet		Solar glass (TSG)
Back sheet		Polymer sheet, black
Frame material		Al alloy, black

CERTIFICATION	
Fire Resistance	Class C
Protection Against Electric Shock	II
IEC 61215:2016, IEC 61730:2016	
IEC 62804 – PID Resistance	
LeTID Resistance	
Snail trail free (AgNP Test)	
IEC/TS 62782:2016 - Dynamic mechanical load testing	

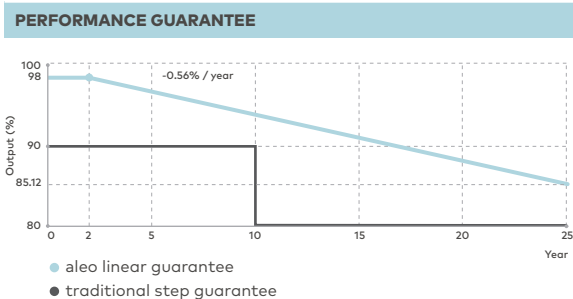
General Building Supervision Test Report against flying sparks and radiant heat (hard roofing)

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]	20

Mechanical load acc. to IEC/EN 61215:2016  
<sup>1</sup> Please observe the mounting conditions in the installation manual  
<sup>2</sup> Testload/ Safety factor 1.5 = Designload

Measurement tolerance of  $P_{MPP}$  under STC -3/+3% |  
 Accuracy of other electrical values -10/+10%  
 Efficiency relating to gross module area

GUARANTEE	
Product Guarantee	25 years
Power Guarantee	25 years – linear



PLEASE CONTACT YOUR AUTHORISED ALEO DEALER

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