

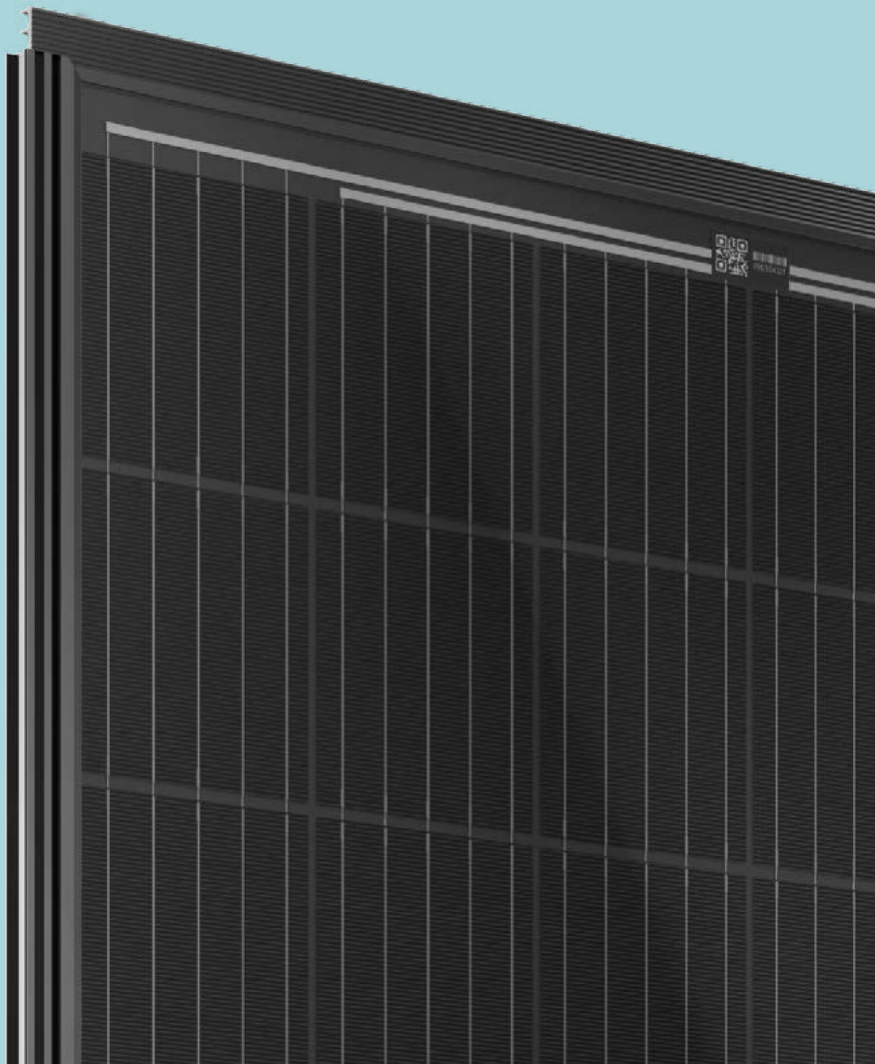
# S83 sol Premium

## 320 - 333W

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

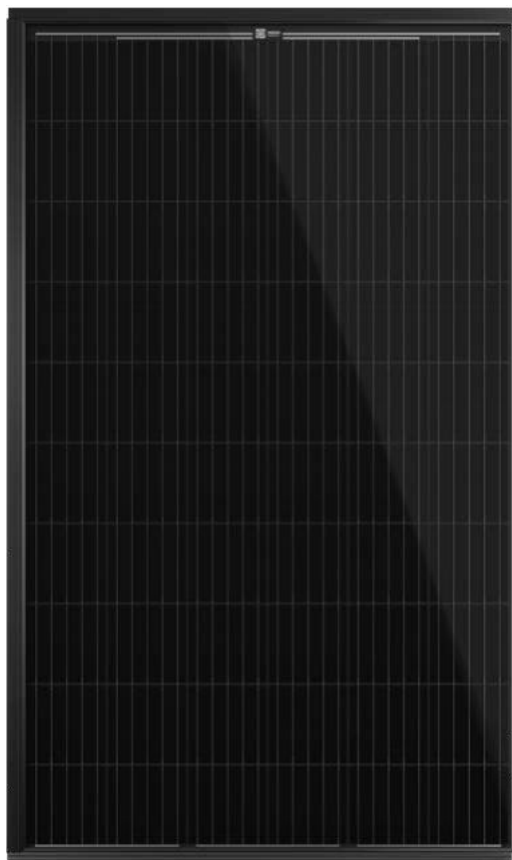
98% of nominal power guaranteed in the first two years

### 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)		S83T325	S83T330	S83T333
Rated power	$P_{MPP}$ [W]	325	330	333
Rated voltage	$V_{MPP}$ [V]	32.8	33.1	33.2
Rated current	$I_{MPP}$ [A]	9.90	9.97	10.03
Open-circuit voltage	$V_{OC}$ [V]	40.5	40.6	40.7
Short-circuit current	$I_{SC}$ [A]	10.40	10.49	10.54
Efficiency	$\eta$ [%]	17.6	17.9	16.7

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

ELECTRICAL DATA (NMOT)		S83T325	S83T330	S83T333
Power	$P_{MPP}$ [W]	240	244	246
Voltage	$V_{MPP}$ [V]	30.4	30.7	30.8
Current	$I_{MPP}$ [A]	7.90	7.95	8.00
Open-circuit voltage	$V_{OC}$ [V]	37.9	38.0	38.0
Short-circuit current	$I_{SC}$ [A]	8.38	8.45	8.49
Efficiency	$\eta$ [%]	16.3	16.5	16.7

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)		S83T325	S83T330	S83T333
Power	$P_{MPP}$ [W]	63	64	65

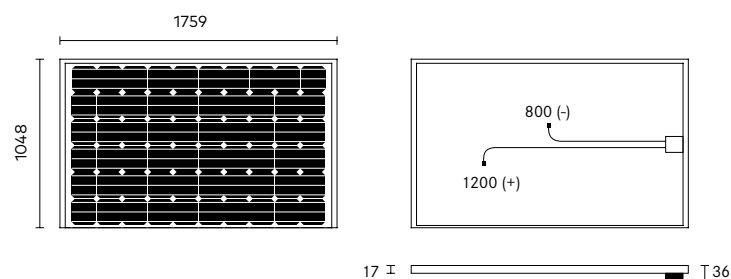
Electrical values measured under: 200 W/m<sup>2</sup>; 25°C; AM 1,5

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	S83T325	S83T330	S83T333
Classification range (positive classification) [W]	0/+4.99	0/+2.99	0/+6.99

## 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	

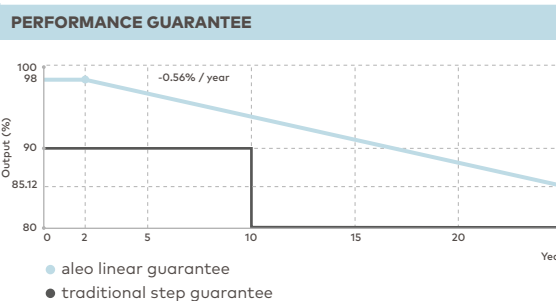
General Building Supervision Test Report against flying sparks and radiant heat (hard roofing)

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>DC</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

**ALEO SOLAR GMBH**  
 Marius-Eriksen-Straße 1  
 17291 PRENZLAU  
 GERMANY

**CONTACT**  
 +49 3984-8328-0  
 info@aleo-solar.de  
 www.aleo-solar.com

©aleo solar GmbH 10/2020

Detailed information about our warranties is available on our website! Subject to change without notice | Errors and omissions excepted | EN | S83sol 320-333W

**aleo**