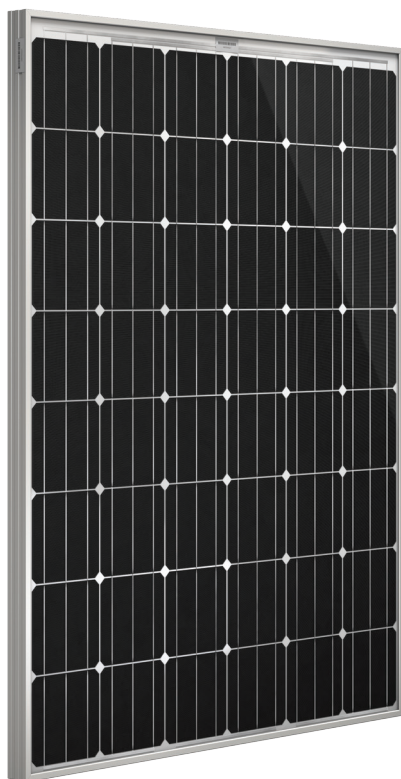




aleo

# Small power packet for more flexibility



## S25

235 - 245 W



QUALITY SIGNED AND SEALED



48

cells

98% of nominal  
power guaranteed  
the first two years

Up to +5%  
more yield  
over conventional  
technologies\*



### PID FREE

PID tested with excellent results  
under the harshest conditions



### CRAFTED WITH PASSION



### 12 YEARS PRODUCT WARRANTY



**CONSTANTLY HIGH CELL QUALITY**  
through strict quality examinations  
by highresolution electroluminescence  
and infraredmeasurements



### 25 YEARS LINEAR PERFORMANCE WARRANTY

\* results following a one-year field study realized  
independently by the Politecnico Milano



Made in Germany

# aleo solar module S25

ELECTRICAL DATA (STC)			S25_235	S25_240	S25_245
Rated power	$P_{MPP}$	[W]	235	240	245
Rated voltage	$V_{MPP}$	[V]	25.2	25.3	25.4
Rated current	$I_{MPP}$	[A]	9.37	9.51	9.66
Open-circuit voltage	$V_{OC}$	[V]	31.5	31.5	31.6
Short-circuit current	$I_{SC}$	[A]	9.83	9.90	9.97
Efficiency	$\eta$	[%]	17.6	18.0	18.4
Electrical values measured under standard test conditions (STC): 1000 W/m <sup>2</sup> ; 25°C; AM 1.5					

BASIC MODULE DATA		
Length x width x height	[mm]	1345 x 990 x 50
Weight	[kg]	16
Number of cells		48
Cell size	[mm]	156.75 x 156.75
Cell material		Monocrystalline Si
Front sheet		Solar glass (TSG)
Back sheet		Polymer sheet, white
Frame material		Al alloy, silver

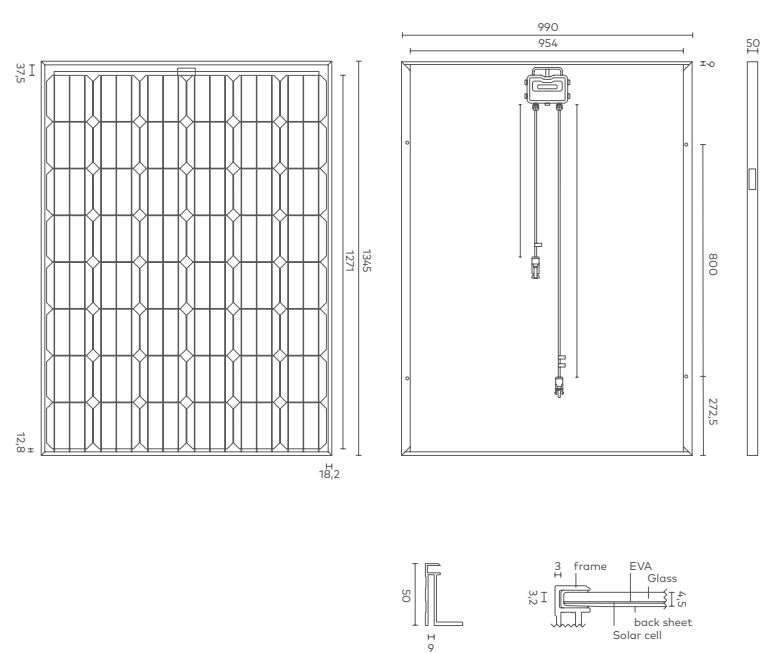
ELECTRICAL DATA (NOCT)			S25_235	S25_240	S25_245
Power	$P_{MPP}$	[W]	173	178	183
Voltage	$V_{MPP}$	[V]	22.9	23.1	23.2
Current	$I_{MPP}$	[A]	7.56	7.72	7.90
Open-circuit voltage	$V_{OC}$	[V]	29.0	29.0	29.1
Short-circuit current	$I_{SC}$	[A]	7.96	8.02	8.08
Efficiency	$\eta$	[%]	16.2	16.7	17.2
Electrical values measured under nominal operating conditions of cells: 800 W/m <sup>2</sup> ; 20°C; AM 1.5; wind 1 m/s NOCT: 48°C (nominal operating cell temperature)					

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

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

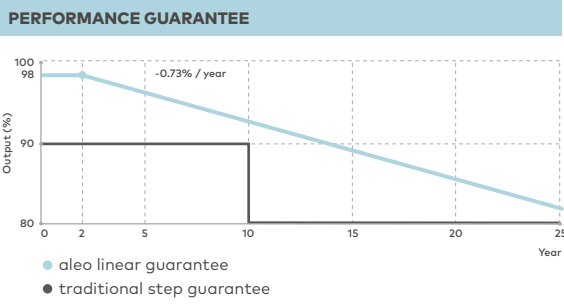
## DIMENSIONS [MM]



CERTIFICATIONS AND WARRANTY	
Product Guarantee	12 years
Power Guarantee	25 years – Linear
Fire Resistance	Class C
Protection Against Electric Shock	II
Certifications	§ IEC 61215, IEC 61730-1/-2 § IEC 62716 – Ammonia Resistance § IEC 61701 – Salt mist Resistance § IEC 62804 – PID Resistance § MCS 010; MCS 005

LOADS		
Max. module pressure load	[Pa]	5400*
Max. module suction load	[Pa]	5400*
Max. system voltage	[V <sub>DC</sub> ]	1000
Reverse current load	$I_R$ [A]	20
Mechanical load acc. to IEC/EN 61215 * Please observe the mounting conditions in the installation manual		

ADDITIONAL ELECTRICAL DATA		
Reduction of STC efficiency from 1000 W/m <sup>2</sup> to 200 W/m <sup>2</sup>	[%] rel.	< 2
Classification range (positive classification)	[W]	0/+4.99



PLEASE CONTACT YOUR AUTHORISED ALEO DEALER