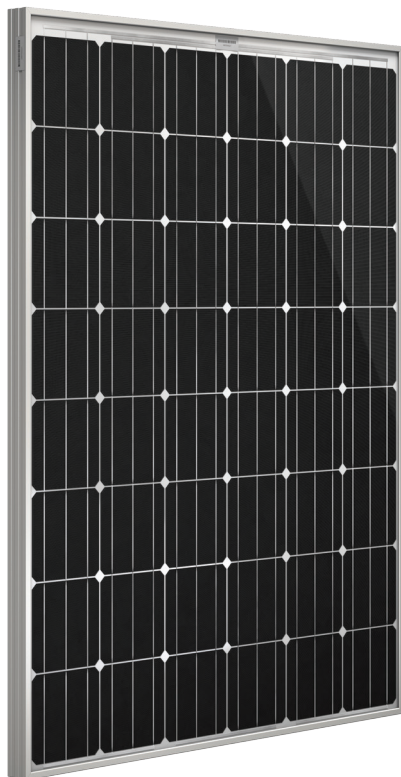




aleo

Small power packet for more flexibility



S25
230 - 240 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_230	S25_235	S25_240
Rated power	P_{MPP} [W]	230	235	240
Rated voltage	V_{MPP} [V]	25.1	25.2	25.3
Rated current	I_{MPP} [A]	9.16	9.37	9.51
Open-circuit voltage	V_{OC} [V]	31.4	31.5	31.5
Short-circuit current	I_{SC} [A]	9.76	9.83	9.90
Efficiency	η [%]	17.3	17.6	18.0

Electrical values measured under standard test conditions (STC): 1000 W/m²; 25°C; AM 1.5

ELECTRICAL DATA (NOCT)		S25_230	S25_235	S25_240
Power	P_{MPP} [W]	168	173	178
Voltage	V_{MPP} [V]	22.8	22.9	23.1
Current	I_{MPP} [A]	7.39	7.56	7.72
Open-circuit voltage	V_{OC} [V]	28.9	29.0	29.0
Short-circuit current	I_{SC} [A]	7.90	7.96	8.02
Efficiency	η [%]	15.8	16.2	16.7

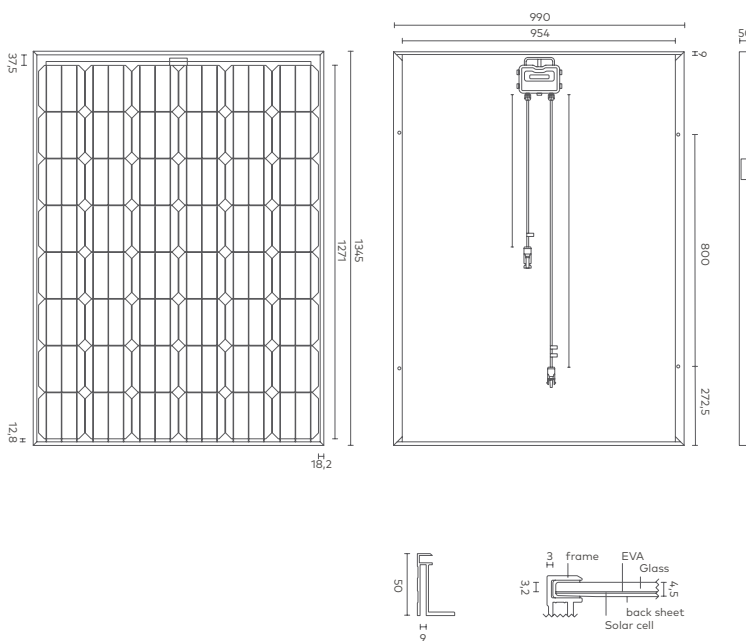
Electrical values measured under nominal operating conditions of cells: 800 W/m²; 20°C; AM 1.5; wind 1 m/s
NOCT: 48°C (nominal operating cell temperature)

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]

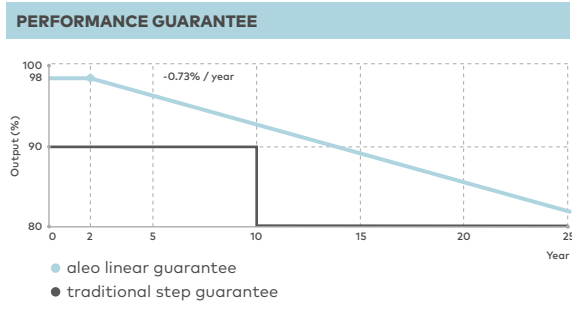


BASIC MODULE DATA		
Length x width x height	[mm]	1345 x 990 x 50
Weight	[kg]	16
Number of cells		48
Cell size	[mm]	156.75 x 156.75
Cell material		Monocrystalline Si
Number bus bars		3 / 4 / 5
Front sheet		Solar glass (TSG)
Back sheet		Polymer sheet, white
Frame material		Al alloy, silver

CERTIFICATIONS AND WARRANTY	
Product Guarantee	12 years
Power Guarantee	25 years – Linear
Fire Resistance	Class C
Protection Against Electric Shock	II
Certifications	<ul style="list-style-type: none"> § 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	$[V_{DC}]$	1000
Reverse current load	I_r [A]	20

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



PLEASE CONTACT YOUR AUTHORISED ALEO DEALER