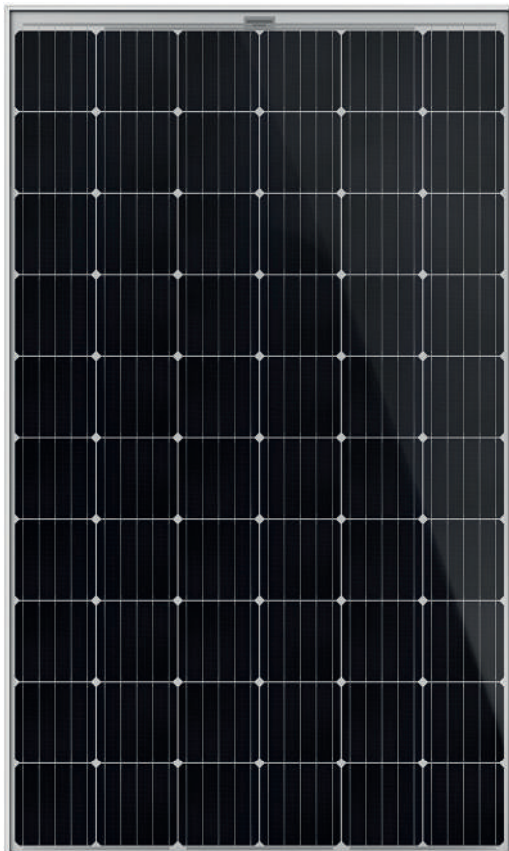
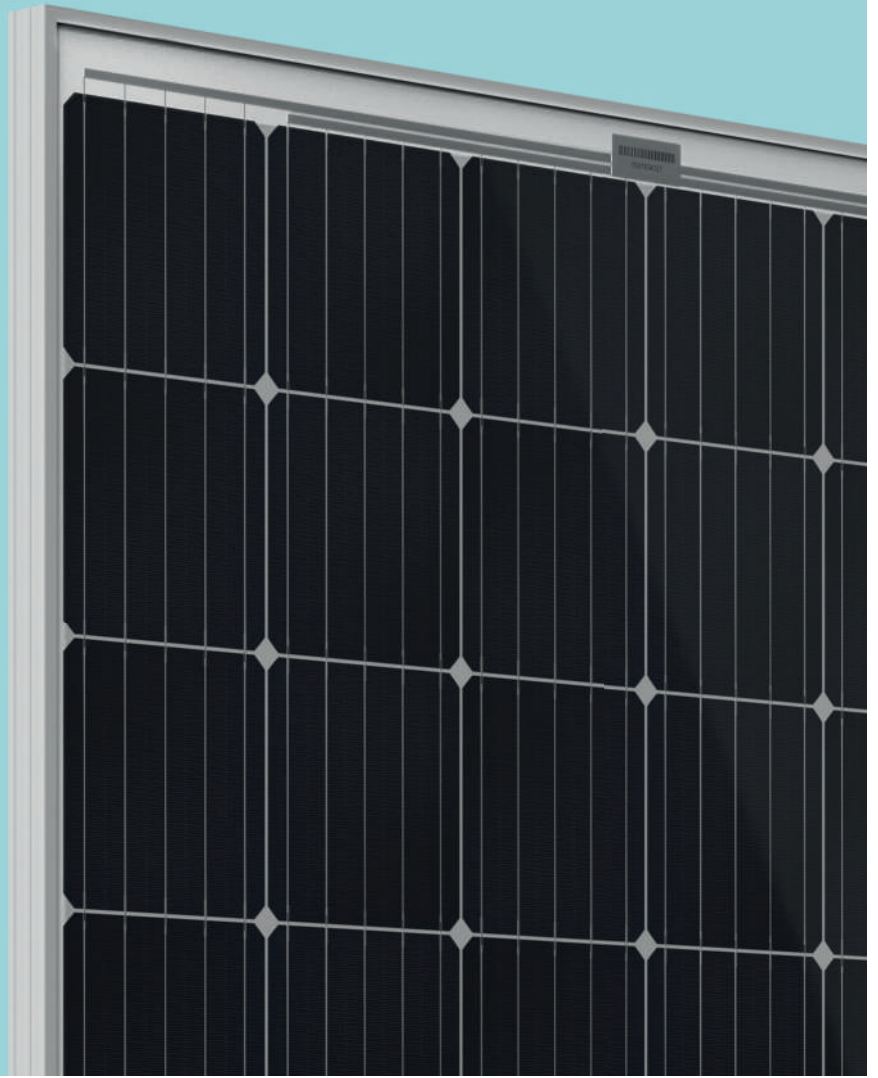


P19

305 - 310W



QUALITY SIGNED AND SEALED

60 CELLS

**25 YEAR PRODUCT GUARANTEE
OPTIONAL AVAILABLE**

UP TO 18.9% EFFICIENCY



PID FREE

PID tested with excellent results
under the harshest conditions



**12 YEARS PRODUCT GUARANTEE
UPGRADEABLE TO 25 YEARS AS A
PREMIUM OPTION**



**25 YEARS LINEAR PERFORMANCE
WARRANTY**



CRAFTED WITH PASSION



CONSTANTLY HIGH CELL QUALITY
through strict quality examinations
by high-resolution electroluminescence
measurements.
100% of diodes are tested.

aleo solar Modul P19

ELECTRICAL DATA (STC)		P19L305	P19L310
Rated power	P_{MPP} [W]	305	310
Rated voltage	V_{MPP} [V]	32.5	32.7
Rated current	I_{MPP} [A]	9.38	9.47
Open-circuit voltage	V_{OC} [V]	39.6	39.8
Short-circuit current	I_{SC} [A]	9.89	9.98
Efficiency	η [%]	18.6	18.9

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

ELECTRICAL DATA (NMOT)		P19L305	P19L310
Power	P_{MPP} [W]	225	229
Voltage	V_{MPP} [V]	30.1	30.3
Current	I_{MPP} [A]	7.49	7.55
Open-circuit voltage	V_{OC} [V]	37.1	37.2
Short-circuit current	I_{SC} [A]	7.97	8.04
Efficiency	η [%]	17.2	17.4

Electrical values measured under nominal module operating temperature: 800 W/m²; 20°C; AM 1.5; wind 1 m/s; Module temperature NMOT: 44.5°C

ELECTRICAL DATA (LOW IRRADIANCE)		P19L305	P19L310
Power	P_{MPP} [W]	59	60

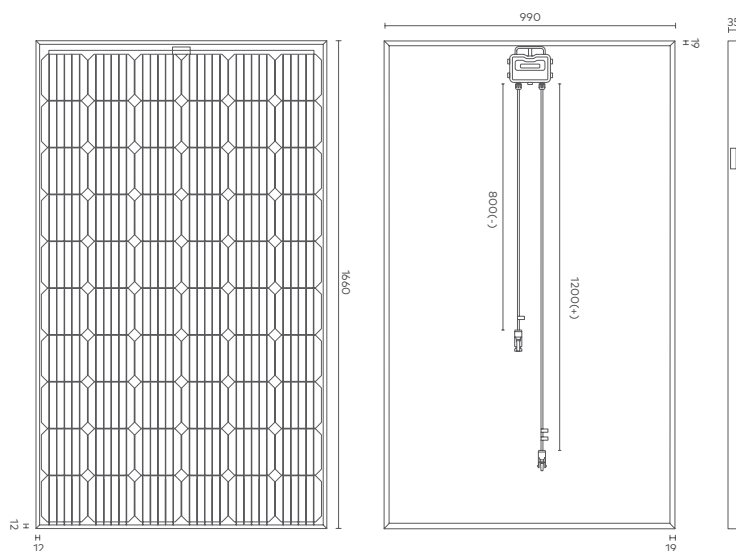
Electrical values measured under: 200 W/m²; 25°C; AM 1,5

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		
Classification range (positive classification)	[W]	0/+4.99

DIMENSIONS [mm]



BASIC MODULE DATA		
Length x width x height	[mm]	1660 x 990 x 35
Weight	[kg]	19
Number of cells		60
Cell size	[mm]	156.75 x 156.75
Cell material		Monocrystalline Si, PERC
Number of bus bars		3 / 5
Front sheet		Solar glass (TSG)
Back sheet		Polymer sheet, white
Frame material		Al alloy, black

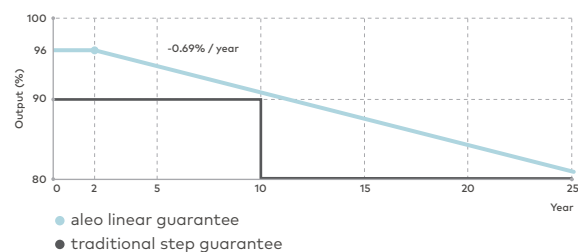
CERTIFICATIONS AND WARRANTY	
Product Guarantee	12 years, optional 25 years
Power Guarantee	25 years – Linear
Fire Resistance	Class C
Protection Against Electric Shock	II
Certifications	IEC 61215, IEC 61730 IEC 62716 – Ammonia Resistance IEC 61701 – Salt mist Resistance IEC 62804 – PID Resistance MCS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

LOADS		
Max. module pressure load (Testload)	[Pa]	5400 ¹
Max. module pressure load (Designload) ²	[Pa]	3600 ¹
Max. module suction load (Testload)	[Pa]	2400 ¹
Max. module suction load (Designload) ²	[Pa]	1600 ¹
Max. system voltage	[V _{DC}]	1000
Reverse current load	I_R [A]	20

Mechanical load acc. to IEC/EN 61215:2016
¹ Please observe the mounting conditions in the installation manual
² 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

PERFORMANCE GUARANTEE



PLEASE CONTACT YOUR AUTHORISED ALEO DEALER

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