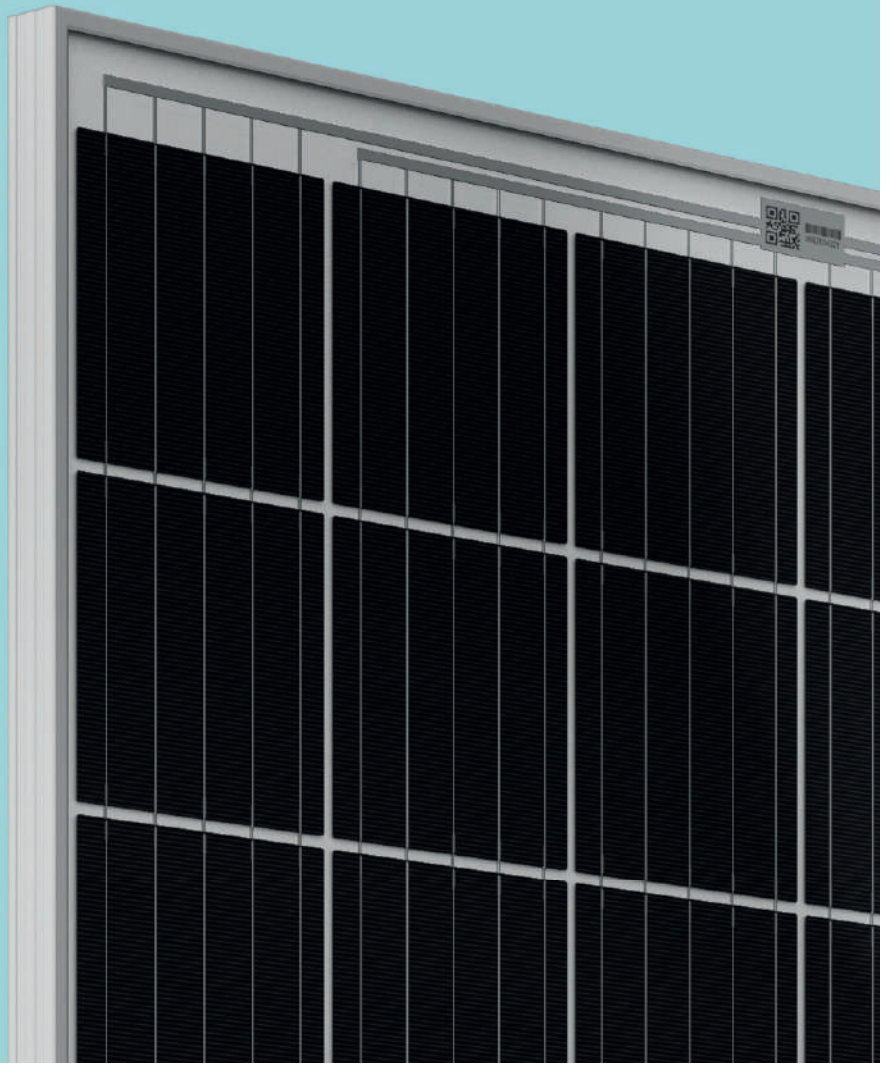


P23

333 - 340 W



QUALITY SIGNED AND SEALED



THE POWERFUL PROJECT MODULE

**25 YEAR PRODUCT GUARANTEE
OPTIONAL AVAILABLE**

60 CELLS



**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.



- MADE IN GERMANY -

aleo solar module P23

ELECTRICAL DATA (STC)		P23L333	P23L340
Rated power	P_{MPP} [W]	333	340
Rated voltage	V_{MPP} [V]	33.4	33.7
Rated current	I_{MPP} [A]	9.97	10.09
Open-circuit voltage	V_{OC} [V]	40.8	41.0
Short-circuit current	I_{SC} [A]	10.44	10.56
Efficiency	η [%]	19.0	19.4

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

ELECTRICAL DATA (NMOT)		P23L333	P23L340
Power	P_{MPP} [W]	246	251
Voltage	V_{MPP} [V]	30.9	31.3
Current	I_{MPP} [A]	7.95	8.05
Open-circuit voltage	V_{OC} [V]	38.1	35.4
Short-circuit current	I_{SC} [A]	8.41	8.51
Efficiency	η [%]	17.5	17.9

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)		P23L333	P23L340
Power	P_{MPP} [W]	65	66

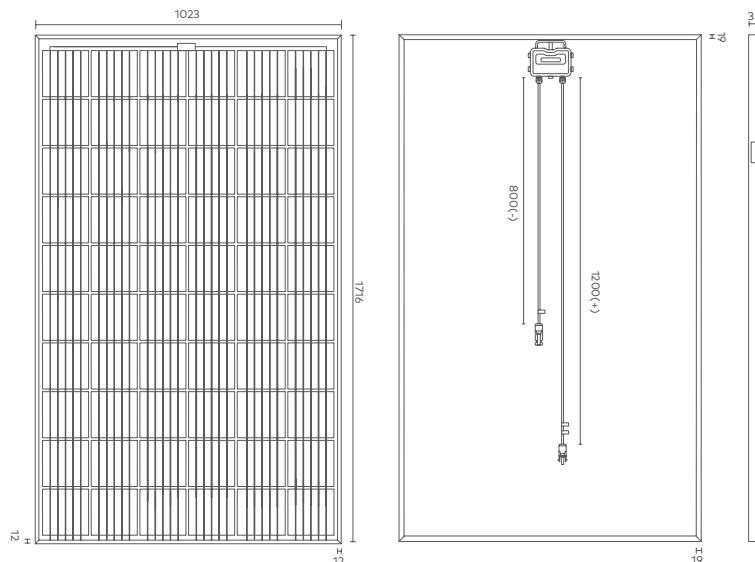
Electrical values measured under: 200 W/m²; 25°C; AM 1.5

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		Genuine MC4 (PV-KST4-EVO)	
Bypass diodes		3	

CLASSIFICATION		P23L333	P23L340
Classification range (positive classification)	[W]	0/+6.99	0/+4.99

DIMENSIONS [mm]



BASIC MODULE DATA		
Length x width x height	[mm]	1716 x 1023 x 35
Weight	[kg]	19.3
Number of cells		60
Cell size	[mm]	158.75 x 158.75
Cell material		Monocrystalline Si, PERC
Number of bus bars		5
Front sheet		3.2 mm Solar glass (TSG)
Back sheet		Polymer sheet, white
Frame material		Al alloy, silver

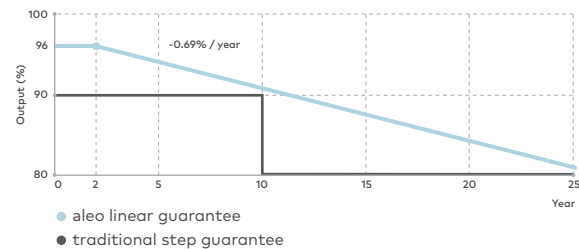
CERTIFICATIONS AND GUARANTEES	
Product Guarantee	12 years, optional 25 years
Power Guarantee	25 years – Linear
Fire Resistance	Class C
Protection Against Electric Shock	II
Certifications	IEC 61215:2016, IEC 61730:2016

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

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 11/2019

aleo