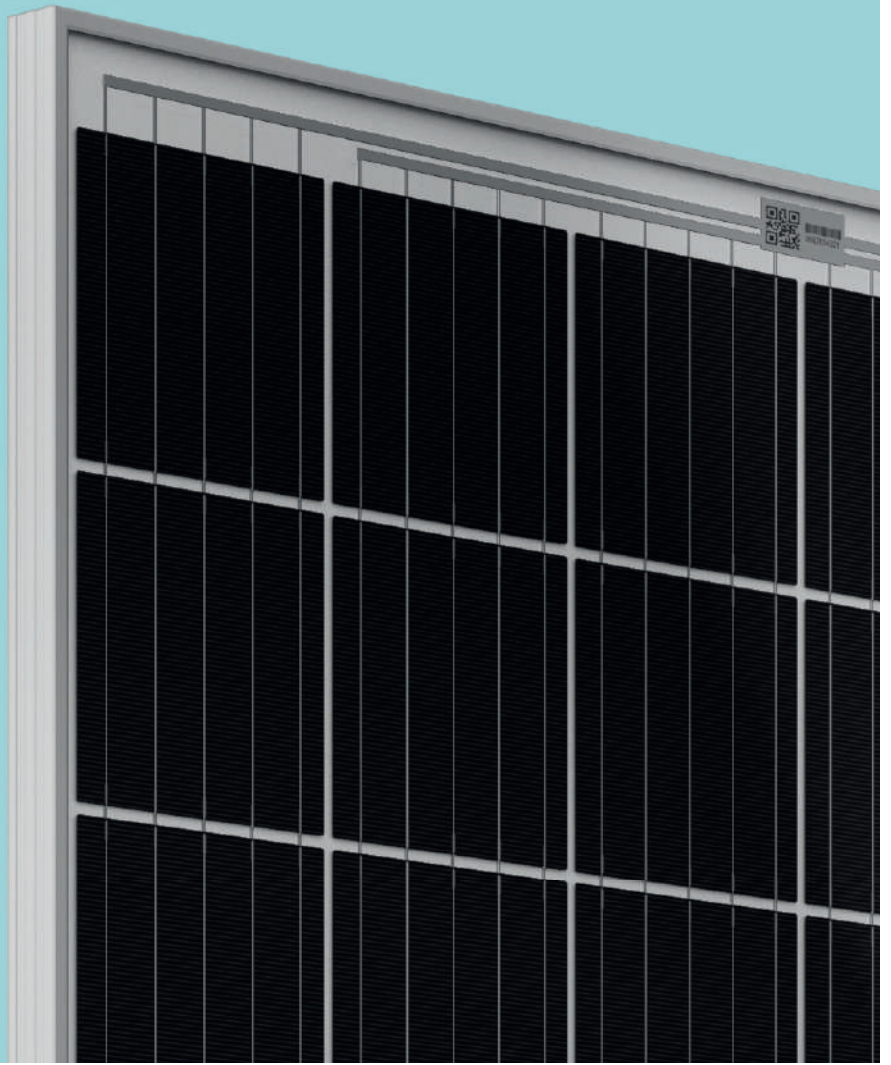
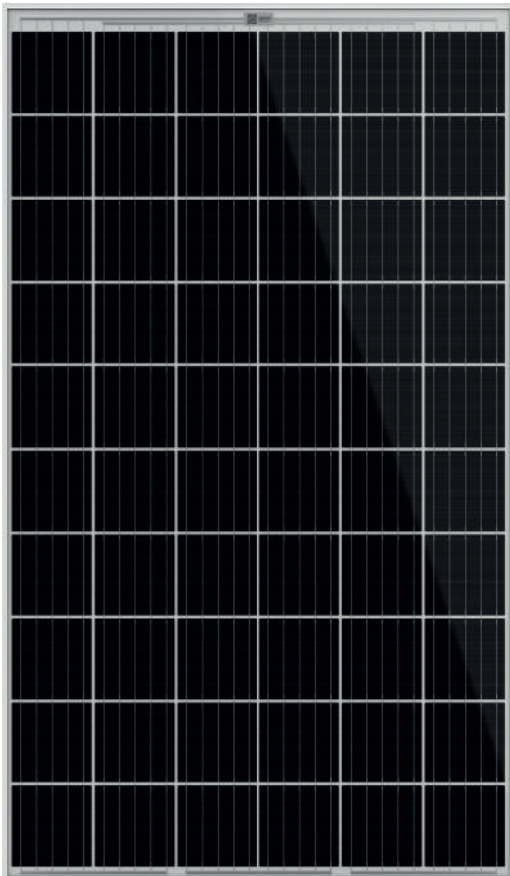


P23

320 - 325 W



QUALITY SIGNED AND SEALED



THE POWERFUL PROJECT MODULE

**25 YEAR PRODUCT GUARANTEE
OPTIONAL AVAILABLE**

60 CELLS



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 highresolution electroluminescence
measurements.
100% of diodes are tested.

aleo solar module P23

ELECTRICAL DATA (STC)		P23L320	P23L325	BASIC MODULE DATA	
Rated power	P_{MPP} [W]	320	325	Length x width x height	[mm] 1716 x 1023 x 35
Rated voltage	V_{MPP} [V]	32.8	33.0	Weight	[kg] 19.3
Rated current	I_{MPP} [A]	9.75	9.85	Number of cells	60
Open-circuit voltage	V_{OC} [V]	40.3	40.5	Cell size	[mm] 158.75 x 158.75
Short-circuit current	I_{SC} [A]	10.22	10.31	Cell material	Monocrystalline Si, PERC
Efficiency	η [%]	18.2	18.5	Number of bus bars	5

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

ELECTRICAL DATA (NMOT)		P23L320	P23L325
Power	P_{MPP} [W]	236	240
Voltage	V_{MPP} [V]	30.4	30.6
Current	I_{MPP} [A]	7.78	7.85
Open-circuit voltage	V_{OC} [V]	37.7	37.9
Short-circuit current	I_{SC} [A]	8.24	8.31
Efficiency	η [%]	16.8	17.1

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)		P23L320	P23L325
Power	P_{MPP} [W]	62	63

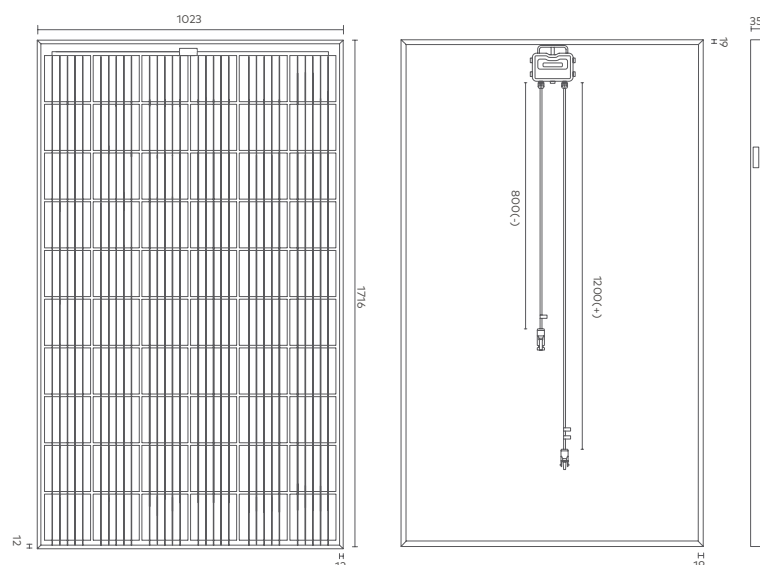
Electrical values measured under: 200 W/m²; 25°C; AM 1.5

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		P23L320	P23L325
Classification range (positive classification)	[W]	0/+4.99	0/+4.99

DIMENSIONS [mm]



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, 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

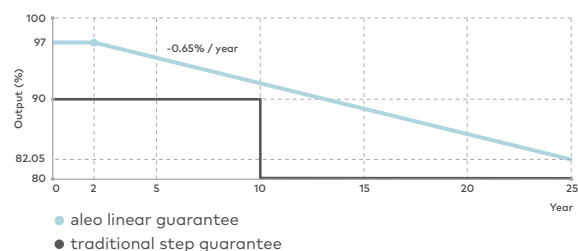
² Testload/ Safety factor 1.5 = Designload

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

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

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

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