EN | EN | DE **230 - 245 W**

Solar module aleo S_18

Strong Performance

Robust, strong yields and first class workmanship: The aleo S_18 is built for operation over decades. Whether by salt mist or barn vapour, high snow loads or strong wind pressure – the aleo S_18 delivers long-term high energy yields under extreme conditions. The quality of aleo modules is continuously tested and confirmed by independent institutes. That's why it's no wonder that the aleo S_18 module was ranked among the test winners with the rating "very good" in a module test by the magazine Öko-Test (april 2010). aleo modules are sorted with a positive power classification. The performance is guaranteed by aleo solar for 25 years, the product guarantee is for 10 years.

Everything from a single source
Consultancy, complete system planning, delivery, financing, insurance, training, disposal (PV CYCLE)

Comprehensive quality management
Production to international quality and environmental standards, for example, ISO 9001 and ISO 14001 as well as stringent internal controlling

Robust – also in corrosive environments
Ammonia resistance certification from DLG and SGS, achieved the highest level 6 standard for salt mist test

Known worldwide and certified
VDE (IEC 61215 Ed. 2, IEC 61730-1 Ed. 1 and IEC 61730-2 Ed. 1), Clean Energy Council (approved PV module)

DLG FOKUS TEST 12/11 Ammoniakbeständigkeit

SGS PERFORMANCE TESTED SALT MIST RESISTANT PHOTOVOLTAIC PRODUCT

SGS PERFORMANCE TESTED CORROSIVE GAS (NH_3) RESISTANT PHOTOVOLTAIC PRODUCT

Our modules – Quality signed and sealed

Contact: aleo solar | Osterstrasse 15 | 26122 Oldenburg | Germany | **www.aleo-solar.com**

aleo

Solar module aleo S_18

Electrical data (STC)			S18.230	S18.235	S18.240	S18.245
Rated power	P_{MPP}	[W]	230	235	240	245
Rated voltage	V_{MPP}	[V]	29.1	29.3	29.5	29.7
Rated current	I_{MPP}	[A]	7.90	8.01	8.13	8.25
Open-circuit voltage	V_{OC}	[V]	36.6	36.8	37.0	37.1
Short-circuit current	I_{SC}	[A]	8.44	8.54	8.65	8.75
Efficiency	η	[%]	14.0	14.3	14.6	14.9

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

Electrical data (NOCT)			S18.230	S18.235	S18.240	S18.245
Power	P_{MPP}	[W]	165	169	173	177
Voltage	V_{MPP}	[V]	27.6	27.9	28.3	28.6
Current	I_{MPP}	[A]	5.99	6.05	6.11	6.18
Open-circuit voltage	V_{OC}	[V]	33.7	33.8	34.0	34.2
Short-circuit current	I_{SC}	[A]	6.62	6.67	6.72	6.77
Efficiency	η	[%]	12.6	12.8	13.1	13.5

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)

Additional electrical data		
Reduction of STC efficiency from 1000 W/m² to 200 W/m²	[%] rel.	< 6
Classification range (positive classification)	[W]	0/+4.99

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]	15

Mechanical load acc. to IEC/EN 61215

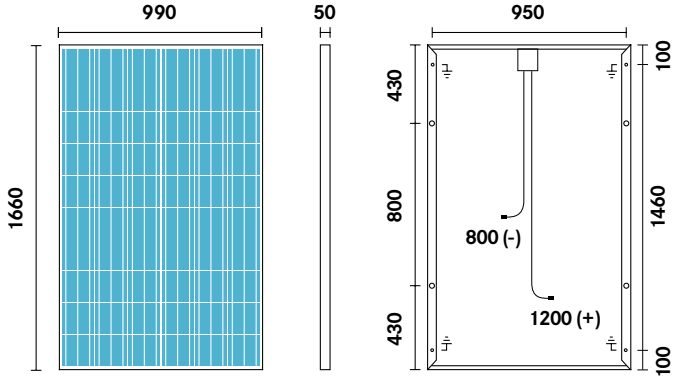
Temperature coefficients			
1st temperature coefficient	α (I_{SC})	[%/K]	+0.04
2nd temperature coefficient	β (U_{OC})	[%/K]	-0.34
3rd temperature coefficient	γ (P_{MPP})	[%/K]	-0.46

Basic data module		
Length x width x height	[mm³]	1660 x 990 x 50
Weight	[kg]	20
Number of cells		60
Cell size	[mm²]	156 x 156
Cell material		Polycrystalline Si
Front sheet		Solar glass (TSG)
Back sheet		Polymer sheet
Frame material		Al alloy

Basic data junction box		
Length x width x height	[mm³]	141 x 101 x 28
IP class		IP65
Cable length	[mm]	1200 (+), 800 (-)
Connectors		MC3 class
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]



Please contact your authorised aleo dealer