

More power due to
High Efficiency

Strong Performance

aleo's commitment to strong performance makes the module through unique combination of components even more efficient. 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. 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.



High Efficiency

Efficient use of sunlight due to unique combination of module components



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



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)

Our modules – Quality signed and sealed



Solar module aleo S_18

Electrical data (STC)			S 18.245	S 18.250	S 18.255
Rated power	P_{MPP}	[W]	245	250	255
Rated voltage	V_{MPP}	[V]	30.2	30.3	30.4
Rated current	I_{MPP}	[A]	8.11	8.24	8.38
Open-circuit voltage	V_{OC}	[V]	37.5	37.5	37.6
Short-circuit current	I_{SC}	[A]	8.63	8.76	8.88
Efficiency	η	[%]	14.9	15.2	15.5

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

Electrical data (NOCT)			S 18.245	S 18.250	S 18.255
Power	P_{MPP}	[W]	179	183	187
Voltage	V_{MPP}	[V]	27.3	27.4	27.5
Current	I_{MPP}	[A]	6.56	6.67	6.78
Open-circuit voltage	V_{OC}	[V]	34.5	34.5	34.6
Short-circuit current	I_{SC}	[A]	7.02	7.12	7.22
Efficiency	η	[%]	13.6	13.9	14.2

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/m ² to 200 W/m ²	[%] rel.	< 4
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

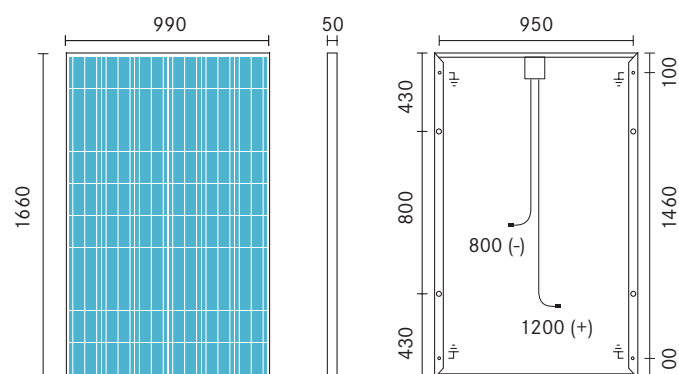
Temperature coefficients			
1st temperature coefficient	$\alpha (I_{SC})$	[%/K]	+0.04
2nd temperature coefficient	$\beta (V_{OC})$	[%/K]	-0.31
3rd temperature coefficient	$\gamma (P_{MPP})$	[%/K]	-0.43

Measurement tolerance of P_{MPP} under STC -3/+3% | Accuracy of other electrical values -10/+10% | Efficiency relating to gross module area

Basic module data		
Length x width x height	[mm ³]	1660 x 990 x 50
Weight	[kg]	20
Number of cells		60
Cell size	[mm ²]	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	[mm ³]	141 x 101 x 28
IP class		IP65
Cable length	[mm]	1200 (+), 800 (-)
Connectors		MC3
Bypass diodes		3

Dimensions [mm]



Please contact your authorised aleo dealer