



Featuring the latest technological developments in the solar industry spearheaded by aleo, S19 high power modules are the unique marriage of deep technological know-how with high-end components.

The result is a product that is not only powerful but also just performs better. Studies by independent research institutes show S19 modules produce significantly more electricity than conventional technologies thanks to distinctive innovations.

You get what you pay for. aleo provides a 10 year product guarantee together with a 25 year best-in class linear performance guarantee. Should the module present a failure, aleo is by your side to cover the material and labour costs associated with the replacement of the module.

With aleo, you can trust in your decision.



Made in Germany



High Efficiency

High Efficient use of sunlight and excellent weak light behaviour due to unique combination of module components



PID free

PID tested with excellent results under the harshest conditions



Extensive quality management

production according to international quality and environmental standards, such as ISO 9001 and ISO 14001 as well as strict internal examinations



Constantly high cell quality

through strict quality examinations by highresolution electroluminescence and infrared measurements



25 years guarantee

10 years product and linear 25 years linear performance guarantee



Recycling

Proper recycling of all sold modules through full membership in the PV Cycle Association



Everything from a single source

Intelligent and perfectly matched systems and services from the technical and economical plant layout up to the factory service



Worldwide known and certified

through VDE (IEC 61215 Ed. 2, IEC 61730-1 Ed.1 and IEC 61730-2 Ed. 1)















Solar module aleo \$19

Electrical data (STC)		S19L295	S19L300	
Rated power	P _{MPP}	[W]	295	300
Rated voltage	V _{MPP}	[V]	31.3	31.2
Rated current	I _{MPP}	[A]	9.42	9.63
Open-circuit voltage	V _{oc}	[V]	39.3	39.4
Short-circuit current	I _{sc}	[A]	9.87	9.97
Efficiency	η	[%]	18.0	18.3

Electrical values measured under standard test conditions (STC): 1000 W/m^2 ; 25°C; AM 1.5

Electrical data (NOCT)		S19L295	S19L300	
Power	P _{MPP}	[W]	215	219
Voltage	V _{MPP}	[V]	28.4	28.2
Current	I _{MPP}	[A]	7.59	7.76
Open-circuit voltage	V _{oc}	[V]	36.2	36.3
Short-circuit current	I _{sc}	[A]	7.99	8.07
Efficiency	η	[%]	16.4	16.7

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)

Reduction of STC efficiency from 1000 W/m² [%] 0 to 200 W/m² rel. Classification range (positive classification) [W] 0/+4.99	Additional electrical data		
Classification range (positive classification) [W] 0/+4.99	,		0
English and Character and Char	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]	20

Mechanical load acc. to IEC/EN 61215

Temperature coefficients			
Temperature coefficient I _{sc}	α (I _{sc})	[%/K]	+0.05
Temperature coefficient V _{oc}	β (V _{oc})	[%/K]	-0.29
Temperature coefficient P _{MPP}	γ (P _{MPP})	[%/K]	-0.40

Basic module data				
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		Monocrystalline Si		
Front sheet		Solar glass (TSG)		
Back sheet		Polymer sheet		
Frame material		Al alloy		

Basic data junction box		
Length x width x height	[mm³]	148 x 123 x 27
IP class		IP65
Cable length	[mm]	1200 (+), 800 (-)
Connectors		MC4
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



