

Output classes 170 W - 190 W



**solar module aleo s\_17**

**aleo**

# aleo

## → solar module aleo S\_17 6 inch+ mono

### Specifications

#### Description

#### Data at 1,000 W/m<sup>2</sup> (STC)<sup>1</sup>

Rated output

Rated current

Rated voltage

Short-circuit current

Open-circuit voltage

Area-to-power ratio

Efficiency<sup>3</sup>

#### Data at 800 W/m<sup>2</sup> (NOCT)<sup>2</sup>

Output

Current

Voltage

Short-circuit current

Open-circuit voltage

Efficiency<sup>3</sup>

Classification range (positive classification)

Measurement accuracy P<sub>MPP</sub>

Max. system voltage

Permissible module load<sup>4</sup>

### Output class 170 W

aleo S\_17 | 170

P <sub>MPP</sub>	170 W
I <sub>MPP</sub>	7.52 A
U <sub>MPP</sub>	22.6 V
I <sub>SC</sub>	8.40 A
U <sub>OC</sub>	30.2 V
A <sub>p</sub>	8.10 m <sup>2</sup> /kWp
η(eta)	12.3%

P <sub>MPP</sub>	133 W
I <sub>MPP</sub>	6.24 A
U <sub>MPP</sub>	21.3 V
I <sub>SC</sub>	6.77 A
U <sub>OC</sub>	27.7 V
η(eta)	12.1%

	-0 W/+4.99 W
	-3%/+3%
	1,000 V DC
	5,400 Pa

### Output class 175 W

aleo S\_17 | 175

P <sub>MPP</sub>	175 W
I <sub>MPP</sub>	7.58 A
U <sub>MPP</sub>	23.1 V
I <sub>SC</sub>	8.41 A
U <sub>OC</sub>	30.3 V
A <sub>p</sub>	7.87 m <sup>2</sup> /kWp
η(eta)	12.7%

P <sub>MPP</sub>	136 W
I <sub>MPP</sub>	6.30 A
U <sub>MPP</sub>	21.6 V
I <sub>SC</sub>	6.79 A
U <sub>OC</sub>	27.8 V
η(eta)	12.3%

	-0 W/+4.99 W
	-3%/+3%
	1,000 V DC
	5,400 Pa

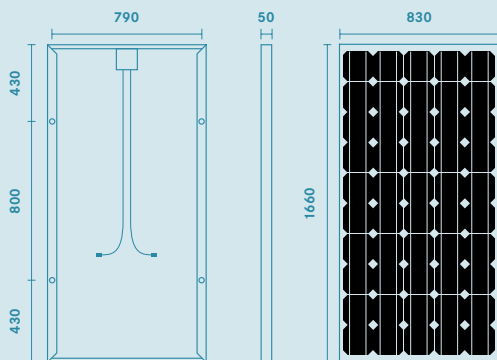
<sup>1</sup> Electrical values under standard test conditions (STC): 1,000 W/m<sup>2</sup>; 25°C; AM 1.5

<sup>2</sup> Electrical values under nominal operating cell temperature (NOCT): 800 W/m<sup>2</sup>; AM 1.5

<sup>3</sup> For the module surface as a whole (1.3778 m<sup>2</sup>)

<sup>4</sup> In accordance with IEC 61215, 10.16 „Extended load test“, installation in accordance with the manual Datasheet tolerances, except for rated output: +/-10%

### Dimensions [mm]



### Additional information

#### Temperature coefficients

α (I<sub>SC</sub>)

β (U<sub>OC</sub>)

γ (P<sub>MPP</sub>)

#### Certification

IEC/EN 61215, IEC/EN 61730 and protection

#### Testing organization

VDE

#### Module dimensions

1660 x 830 x 50 mm

#### Weight

17 kg

### Output class 180 W

aleo S\_17 | 180

$P_{MPP}$	180 W
$I_{MPP}$	7.63 A
$U_{MPP}$	23.6 V
$I_{SC}$	8.42 A
$U_{OC}$	30.4 V
$A_p$	7.65 m <sup>2</sup> /kWp
$\eta(\text{eta})$	13.1%

$P_{MPP}$	138 W
$I_{MPP}$	6.27 A
$U_{MPP}$	22.0 V
$I_{SC}$	6.81 A
$U_{OC}$	27.8 V
$\eta(\text{eta})$	12.5%

-0 W/+4.99 W  
-3%/+3%  
1,000 V DC  
5,400 Pa

### Output class 185 W

aleo S\_17 | 185

$P_{MPP}$	185 W
$I_{MPP}$	7.68 A
$U_{MPP}$	24.1 V
$I_{SC}$	8.43 A
$U_{OC}$	30.5 V
$A_p$	7.45 m <sup>2</sup> /kWp
$\eta(\text{eta})$	13.4%

$P_{MPP}$	141 W
$I_{MPP}$	6.29 A
$U_{MPP}$	22.4 V
$I_{SC}$	6.83 A
$U_{OC}$	27.9 V
$\eta(\text{eta})$	12.8%

-0 W/+4.99 W  
-3%/+3%  
1,000 V DC  
5,400 Pa

### Output class 190 W

aleo S\_17 | 190

$P_{MPP}$	190 W
$I_{MPP}$	7.72 A
$U_{MPP}$	24.6 V
$I_{SC}$	8.44 A
$U_{OC}$	30.6 V
$A_p$	7.25 m <sup>2</sup> /kWp
$\eta(\text{eta})$	13.8%

$P_{MPP}$	143 W
$I_{MPP}$	6.27 A
$U_{MPP}$	22.8 V
$I_{SC}$	6.85 A
$U_{OC}$	28.0 V
$\eta(\text{eta})$	13.0%

-0 W/+4.99 W  
-3%/+3%  
1,000 V DC  
5,400 Pa

+0.03%/K  
-0.34%/K  
-0.48%/K

class II

**Reduction in efficiency**  
From 1,000 W/m<sup>2</sup> to 200 W/m<sup>2</sup>

< 6%

**Reverse current load**

$I_R$  15 A

**NOCT**

47°C

**Power guarantee**

10 years: 90%, 25 years: 80%

May 2009 | aleo solar

VDE Prüfinstitut



## solar module aleo S\_17

The aleo S\_17 solar module is characterized by the state-of-the-art processing of high grade components. 50 monocrystalline silicon cells (6 inch+ | 156 mm x 156 mm) in each module ensure excellent performance, even with limited solar irradiation. A tight output tolerance of -3%/+3% and purely positive module classification (-0 W/+4.99 W) fulfil the highest standards.

The solar cells are embedded in EVA (ethylene-vinyl acetate), which is resistant to UV radiation. The frame consists of a torsionally rigid, corrosion-resistant aluminium alloy, giving the module stability and allowing it to be mounted in a variety of configurations.

The front panel of the module consists of thermally prestressed solar glass. As well as guaranteeing high light transmittance, the glass also protects the solar cells from external weathering influences such as hail, snow and ice. A polymer backsheets guarantees good insulation and long service life.

The junction box on the back is fitted with bypass diodes to prevent individual solar cells from overheating (hot-spot effect). Several solar modules can easily be connected in series by means of two pre-fitted 1 m solar cables with solar plugs.

aleo solar modules are certified according to the European and international IEC/EN 61215 and IEC/EN 61730 standards and fulfil the criteria for protection class II. The power guarantee is at least 90% up to 10 years, and at least 80% up to 25 years, subject to the terms and conditions of the limited warranty.

Please contact your qualified aleo dealer:

aleo solar AG | Gewerbegebiet Nord | Krummer Weg 1 | 17291 Prenzlau | Germany  
Contact details: aleo solar | Osterstrasse 15 | 26122 Oldenburg | Germany  
T +49 (0) 441 219 88-0 | F +49 (0) 441 219 88-150 | info@aleo-solar.com

[www.aleo-solar.com](http://www.aleo-solar.com)