

Output classes 160 W - 170 W



solar module aleo s\_73

aleo

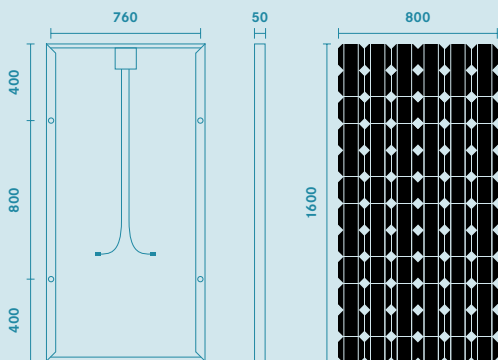
# aleo

## → solar module aleo s\_73 5 Inch mono

Specifications	output class 160 W	output class 165 W	output class 170 W
<b>Description</b>	aleo S_73   160	aleo S_73   165	aleo S_73   170
<b>Data at 1,000 W/m<sup>2</sup> (STC)<sup>1</sup></b>			
Rated output	$P_{MPP}$ 160 W	$P_{MPP}$ 165 W	$P_{MPP}$ 170 W
Rated current	$I_{MPP}$ 4.57 A	$I_{MPP}$ 4.69 A	$I_{MPP}$ 4.80 A
Rated voltage	$U_{MPP}$ 35.0 V	$U_{MPP}$ 35.2 V	$U_{MPP}$ 35.4 V
Short-circuit current	$I_{SC}$ 5.03 A	$I_{SC}$ 5.14 A	$I_{SC}$ 5.25 A
Open-circuit voltage	$U_{OC}$ 43.3 V	$U_{OC}$ 43.5 V	$U_{OC}$ 43.8 V
Required area per unit output	$P_{A spec.}$ 8.00 m <sup>2</sup> /kWp	$P_{A spec.}$ 7.76 m <sup>2</sup> /kWp	$P_{A spec.}$ 7.53 m <sup>2</sup> /kWp
Efficiency <sup>3</sup>	$\eta(\text{eta})$ 12.5%	$\eta(\text{eta})$ 12.9%	$\eta(\text{eta})$ 13.3%
<b>Data at 800 W/m<sup>2</sup> (NOCT)<sup>2</sup></b>			
Output	$P_{MPP}$ 114 W	$P_{MPP}$ 118 W	$P_{MPP}$ 122 W
Current	$I_{MPP}$ 3.64 A	$I_{MPP}$ 3.72 A	$I_{MPP}$ 3.79 A
Voltage	$U_{MPP}$ 31.5 V	$U_{MPP}$ 31.8 V	$U_{MPP}$ 32.1 V
Short-circuit current	$I_{SC}$ 4.05 A	$I_{SC}$ 4.06 A	$I_{SC}$ 4.07 A
Open-circuit voltage	$U_{OC}$ 39.8 V	$U_{OC}$ 40.1 V	$U_{OC}$ 40.5 V
Efficiency <sup>3</sup>	$\eta(\text{eta})$ 11.2%	$\eta(\text{eta})$ 11.5%	$\eta(\text{eta})$ 11.9%
<b>Rated output tolerance under STC</b>	+/- 3%	+/- 3%	+/- 3%
<b>Max. system voltage</b>	1,000 V DC	1,000 V DC	1,000 V DC
<b>Permissible module load<sup>4</sup></b>	5,400 Pa	5,400 Pa	5,400 Pa
<b>Reduction in efficiency</b> From 1,000 W/m <sup>2</sup> to 200 W/m <sup>2</sup>	< 7%	< 7%	< 7%
<b>Reverse current load</b> NOCT	$I_R$ 8 A 47°C	$I_R$ 8 A 47°C	$I_R$ 8 A 47°C

<sup>1</sup> Electrical values under standard test conditions (STC): 1000 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 (1.28 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

<b>Temperature coefficients</b>	$\alpha (I_{SC})$	+ 0.03% / K
	$\beta (U_{OC})$	- 0.35% / K
	$\gamma (P_{MPP})$	- 0.48% / K
<b>Certification</b>	IEC/EN 61215 and protection class II, IEC/EN 61730 work in progress	
<b>Testing organization</b>	VDE	
<b>Module dimensions</b>	1600 x 800 x 50 mm	
<b>Weight</b>	16 kg	
<b>Power guarantee</b>	10 years: 90%, 25 years: 80%	

VDE Prüfinstitut



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