

Output classes 180 W - 190 W



solar module aleo s_77

aleo

aleo

→ solar module aleo s_77 6 inch+ mono

Specifications		Output class 180 W	Output class 185 W	Output class 190 W
Description		aleo S_77 180	aleo S_77 185	aleo S_77 190
Data at 1,000 W/m² (STC)¹				
Rated output	P_{MPP}	180 W	185 W	190 W
Rated current	I_{MPP}	7.63 A	7.68 A	7.72 A
Rated voltage	U_{MPP}	23.6 V	24.1 V	24.6 V
Short-circuit current	I_{SC}	8.42 A	8.43 A	8.44 A
Open-circuit voltage	U_{OC}	30.4 V	30.5 V	30.6 V
Area-to-power ratio	A_p	7.65 m ² /kWp	7.45 m ² /kWp	7.25 m ² /kWp
Efficiency ³	$\eta(\text{eta})$	13.1%	13.4%	13.8%
Data at 800 W/m² (NOCT)²				
Output	P_{MPP}	138 W	141 W	143 W
Current	I_{MPP}	6.27 A	6.29 A	6.27 A
Voltage	U_{MPP}	22.0 V	22.4 V	22.8 V
Short-circuit current	I_{SC}	6.81 A	6.83 A	6.85 A
Open-circuit voltage	U_{OC}	27.8 V	27.9 V	28.0 V
Efficiency ³	$\eta(\text{eta})$	12.5%	12.8%	13.0%
Classification range (positive classification)		-0 W/+4.99 W	-0 W/+4.99 W	-0 W/+4.99 W
Measurement accuracy P_{MPP}		-3%/+3%	-3%/+3%	-3%/+3%
Max. system voltage		1,000 V DC	1,000 V DC	1,000 V DC
Permissible module load⁴		5,400 Pa	5,400 Pa	5,400 Pa
Reduction in efficiency From 1,000 W/m ² to 200 W/m ²		< 6%	< 6%	< 6%
Reverse current load	I_R	15 A	15 A	15 A
NOCT		47°C	47°C	47°C

¹ Electrical values under standard test conditions (STC): 1,000 W/m²; 25°C; AM 1.5

² Electrical values under nominal operating cell temperature (NOCT): 800 W/m²; AM 1.5

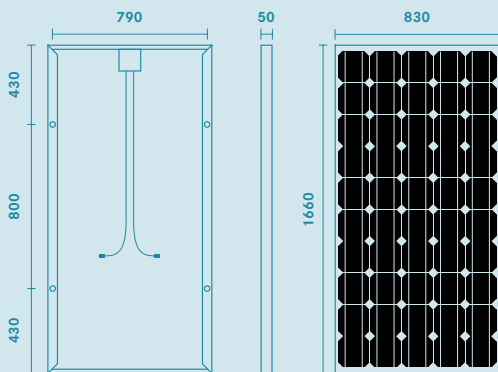
³ For the module surface as a whole (1.3778 m²)

⁴ In accordance with IEC 61215, 10.16 „Extended load test“, installation in accordance with the manual

⁵ The general conditions of our power guarantee apply

Datasheet tolerances, except for rated output: +/-10%

Dimensions [mm]



Additional information

Temperature coefficients	$\alpha (I_{SC})$	+0.03%/K
	$\beta (U_{OC})$	-0.34%/K
	$\gamma (P_{MPP})$	-0.48%/K
Certification	IEC/EN 61215, IEC/EN 61730 and protection class II	
Testing organization	VDE	
Module dimensions	1660 x 830 x 50 mm	
Weight	17 kg	
Power guarantee⁵	10 years: 90%, 25 years: 80%	

VDE Prüfinstitut



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