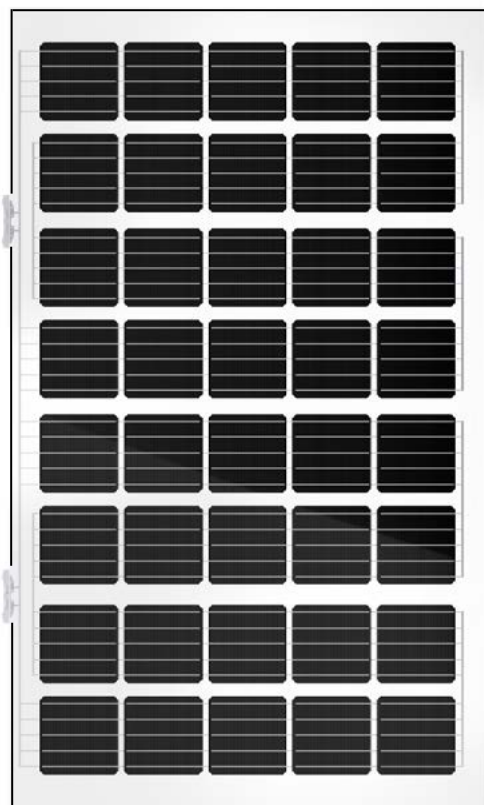
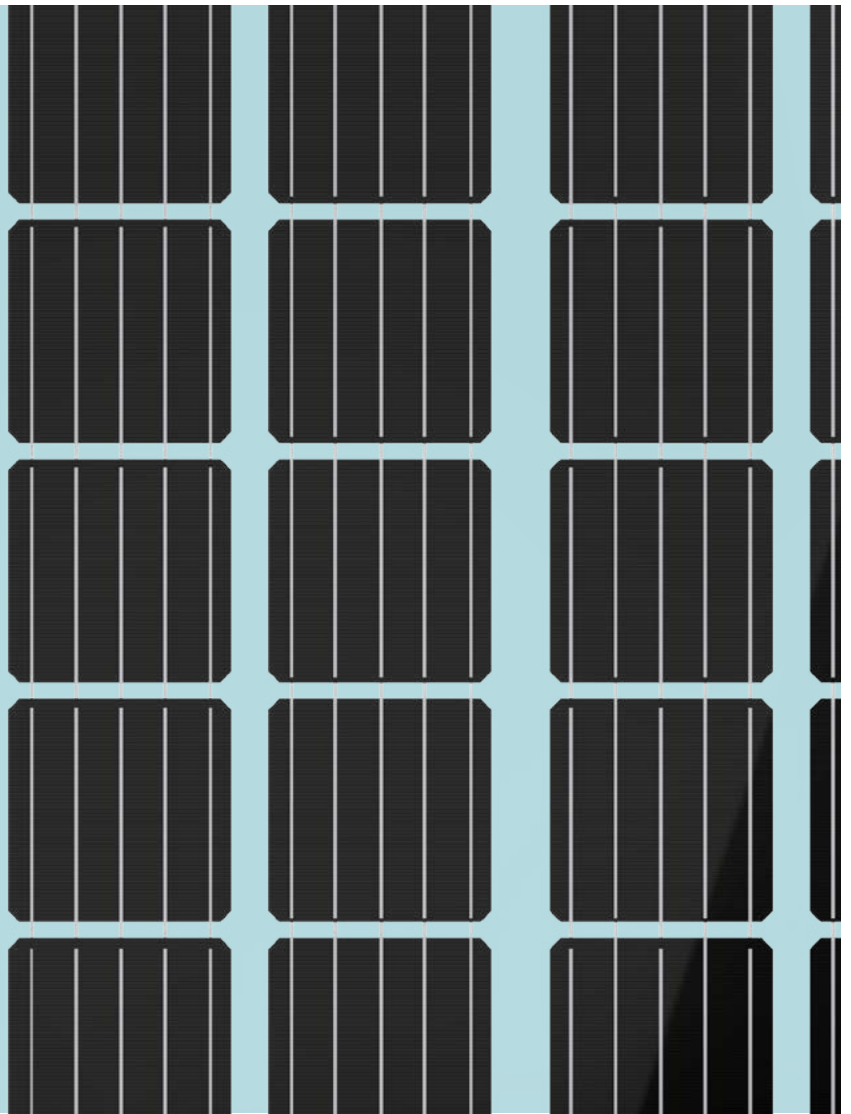


PV-Insulating Glass

200 W



GERMAN ENGINEERING AND MANUFACTURING

Incorporated in 2001, aleo is recognized as one of the most trustworthy manufacturer of solar panels. We produce all our products in our certified production plant in Prenzlau, Germany.

THE BEST GUARANTEE PACKAGE



30 Years Product Guarantee



30 Years linear Performance Warranty

98% of nominal power guaranteed in the first two years

FOR ARCHITECTURAL APPLICATIONS AS

- Facade element
- window glazing
- Indoor roofing

OUR QUALITY IS CERTIFIED

This module is certified according to the latest technical building rules through the German technical authority DIBt (Deutsches Institut für Bautechnik).

Deutsches
Institut
für
Bautechnik

DIBt



aleo solar PV-Insulating Glass

BASIC DATA PV-INSULATING GLASS

Length x width x height	[mm]	1600 x 950 x 33.8
Weight	[kg]	54
Number of cells		40
Cell size	[mm]	156,75 x 156,75
Cell material		Monocrystalline Si, PERC
Front glass		PV module Elegante (4,0 + 4,0 mm TSG with AR coating)
Space in between		Argon gas
Back glass		4 + 4 mm laminated safety glass
U-value	[W/(m²K)]	1.1 (according standard for heatsaving glazing)

ELECTRICAL DATA (PV-MODUL) (STC)

200 W

Rated power	P_{MPP} [W]	200
Rated voltage	V_{MPP} [V]	21.7
Rated current	I_{MPP} [A]	9.22
Open-circuit voltage	V_{OC} [V]	26.8
Short-circuit current	I_{SC} [A]	9.71
Efficiency	η [%]	13.2

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

ADDITIONAL ELECTRICAL DATA

Reduction of STC efficiency from 1000 W/m² to 200 W/m²	[%] rel.	< 2
Classification range (positive classification)	[W]	0/+9.99

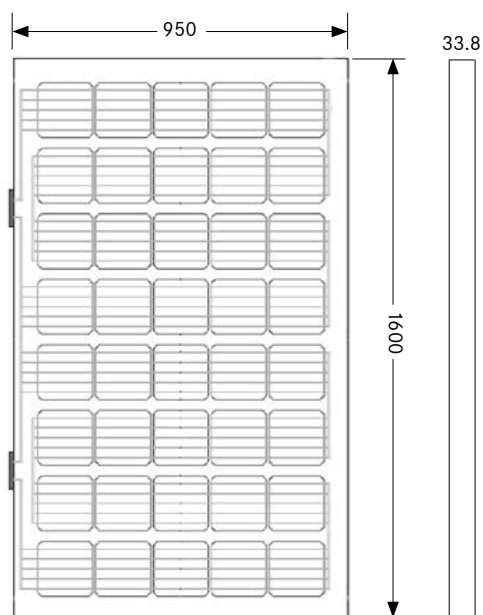
Measurement tolerance of P_{MPP} under STC -3/+3% |
Accuracy of other electrical values -10/+10%
Efficiency relating to gross PV-safety glass area

PHOTOMETRIC DATA

Transparency [%]	35
U value	1.1 (according to standard for thermal insulation glazing)
g-value	0,33**

**The value was calculated with the programme "SommerGlobal" under the boundary condition "summer" for the assessment of comfort and cooling load according to DIN EN ISO 52022-3 point 6.4.6.
There is currently no regulation and measurement procedure for determining the g-value for mono-Si PV modules.

DIMENSIONS PV-INSULATING GLASS [mm]



BASIC DATA JUNCTION BOX

Length x width x height	[mm]	105.8 x 15.5 x 12.5
IP class		IP67
Cable length	[mm]	820
Connectors		2 Tyco wing edge
Bypass diodes		2 (one per junction box)

TEMPERATURE COEFFICIENTS (PV MODULE)

Temperature coefficient I_{SC}	$a (I_{SC})$	[%/K]	+0.05
Temperature coefficient V_{OC}	$b (V_{OC})$	[%/K]	-0.29
Temperature coefficient P_{MPP}	$g (P_{MPP})$	[%/K]	-0.40

CERTIFICATIONS AND WARRANTY (PV MODULE)

Product Guarantee	30 years
Power Guarantee	30 years
Fire Resistance	Class C
Protection Against Electric Shock	II
Certifications	architectural certification from DIBt

*The product and power guarantee applies solely to the PV component of the insulating glass

PERFORMANCE GUARANTEE (PV MODULE)

