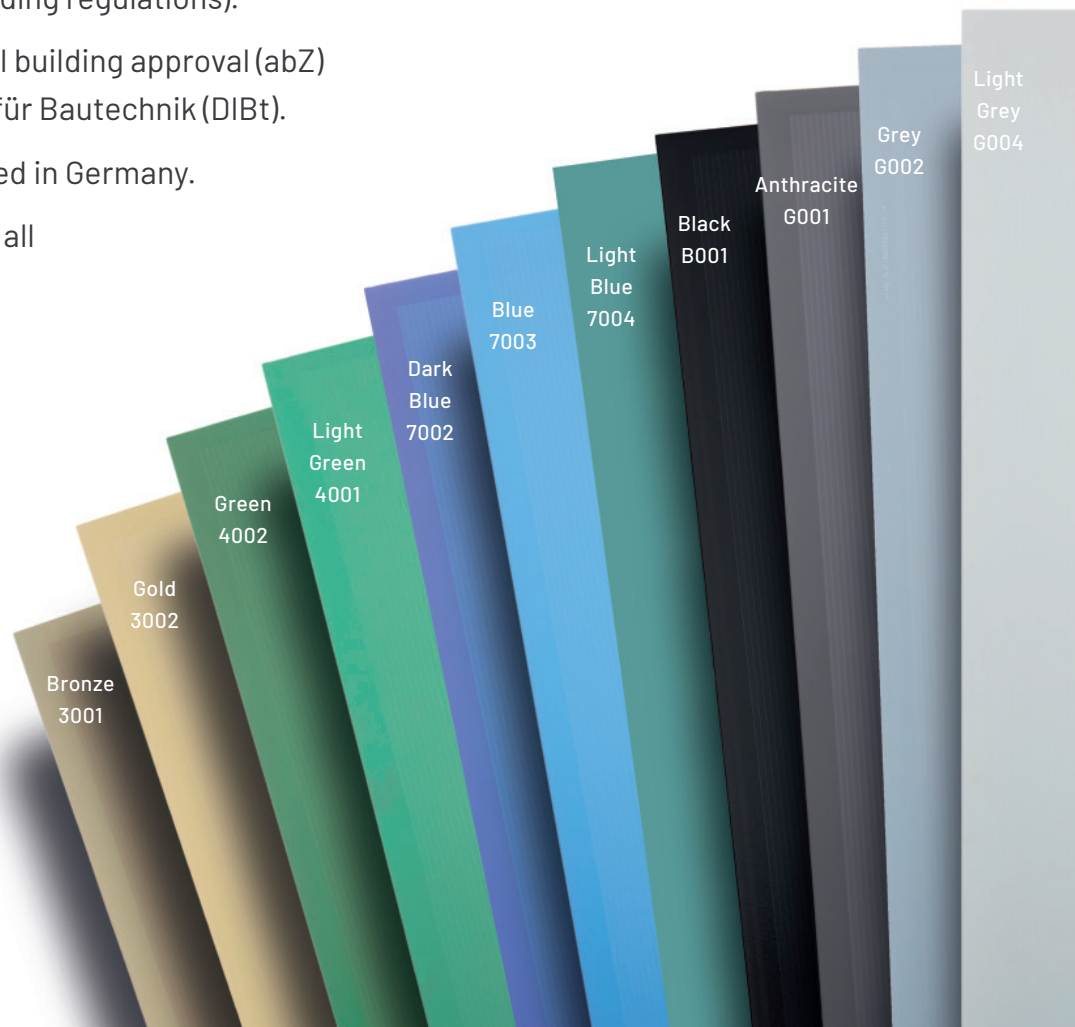


*Empower  
your facade*

SKALA

## *SKALA - as diverse as your ideas*

- Is a thin-film photovoltaic glass-glass module without disturbing frame.
- Has an opaque black color as standard version.
- Does not need mechanical clamping on the front glass due to its backrail system fitting to all common facade substructures.
- Is most suitable for rainscreen ventilated facades.
- Can be combined with a variety of other facade materials.
- Can be installed in portrait and landscape orientation (depends on regional building regulations).
- Has the general technical building approval (abZ) from Deutsches Institut für Bautechnik (DIBt).
- Is developed and produced in Germany.
- Is approved according to all relevant certifications.
- Is available in different colors and lengths.



Brand of

**AVANCIS** 



## ELECTRICAL SPECIFICATION

Data measured under standard test conditions(STC) for full size PV modules:

SKALA xxx <sup>1)</sup> A0BB <sup>2)</sup> S	SKALA 145 S	SKALA 150 S
Nominal power $P_{nom}$ <sup>3)</sup>	145 W	150 W
Sorting	-0/+5 W	
Module efficiency $\eta$	13.8%	14,2%
Aperture efficiency $\eta$	15.3%	15,7%
Open circuit voltage $V_{OC}$ <sup>3)</sup>	89.4 V	89.5 V
Short circuit current $I_{SC}$ <sup>3)</sup>	2.35 A	2.41 A
Voltage at mpp $V_{mpp}$ <sup>3)</sup>	69.4 V	70.4 V
Current at mpp $I_{mpp}$ <sup>3)</sup>	2.09 A	2.13 A
Max. over-current protection $I_R$	4.0 A	
Max. system voltage $V_{sys}$	1000 V	

STC values are valid after stabilization with light according to IEC 61215.

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, spectral light distribution according to atmospheric mass(AM)1.5.<sup>1)</sup> „xxx“ corresponds to power class in Wp (in steps of 5 W)<sup>2)</sup> Color code<sup>3)</sup> Tolerance of manufacturing: ±5%

Data measured at nominal module operating temperature(NMOT)\* and AM 1.5:

	SKALA 145 S	SKALA 150 S
NMOT	40°C	
Nominal power $P_{nom}$	109 W	113 W
Open circuit voltage $V_{OC}$	86 V	86 V
Short circuit current $I_{SC}$	1.88 A	1.93 A
Voltage at mpp $V_{mpp}$	66 V	66 V

\* NMOT: Module operating temperature at light intensity of 800 W/m<sup>2</sup> on the module area, air temperature 20 °C, wind speed 1m/s and operating at mpp.

Temperature coefficient	Value
Temperature coefficient $P_{nom}$	-0.35% / °C
Temperature coefficient $V_{OC}$	-0.26% / °C
Temperature coefficient $I_{SC}$	0% / °C

Data measured at low light intensity:

The relative reduction of the module efficiency at a light intensity of 200 W/m<sup>2</sup> is 6%, compared to 1000 W/m<sup>2</sup> at 25° C module temperature and spectrum AM 1.5. At 500 W/m<sup>2</sup>, the relative increase of module efficiency is +1%.

## PERFORMANCE WARRANTY

Performance after 10 years: 90% of minimum nominal power  
 Performance after 25 years: 80% of minimum nominal power

For detailed information see warranty terms and conditions.

SKALA color code (ATBB)	Available classes
B001	SKALA 145 S, SKALA 150 S
G001	SKALA 145 S, SKALA 150 S





## MECHANICAL SPECIFICATION

SKALA	Value
Dimensions	1587 mm × 664 mm
Thickness	38 mm
Weight	17 kg
Cell type	CIGS
Frame	without
Front cover	3.2 mm single-pane safety glass
Design load <sup>1)</sup> - Safety factor 1.5	upward 4400 Pa   downward 6000 Pa
Junction box protection class	IP67
Dimensions of junction box	60 mm × 60 mm × 11.5 mm
Cable lengths (⊖ plug   ⊕ socket)	200 mm   320 mm
Cable cross section	2.5 mm <sup>2</sup> ; minimal bending radius: 6 × outer diameter
Connector type	H4 (Amphenol)
Fire rating (roof)	Class C (ANSI/UL 790:2004)
Classification of fire behavior (building envelope)	B - s2, d0 (DIN EN 13501-1:2019-05) <sup>2)</sup>

<sup>1)</sup>according to IEC 61730, for standard SKALA mounting

<sup>2)</sup>valid for all SKALA color codes excluding B001: can be ordered optionally



- Design qualification and type approval: IEC 61215:2016
- Safety qualification: IEC 61730:2016
- German general building approval (abZ): Z-70.1-224
- WEEE number: DE33274866

**MADE IN GERMANY**

Packaging information (Standard packaging)	
Size including pallet (LxWxH)	1650 mm × 800 mm × 1000 mm
Approx. gross weight (full box)	375 kg
Modules per box	20
Maximum no. of stacked boxes	1 on 1 (batch of 2)
Max. truck loading	48 (3 × 8 + 3 × 8)
Max. 40 ft container load (24 t)	28 (1 × 14 + 1 × 14)

Variation of packaging size on individual request

## PRODUCT WARRANTY

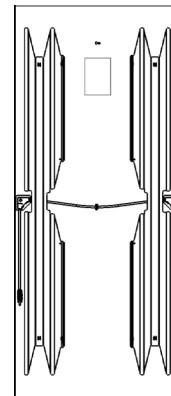
PV modules are free from defects in materials and workmanship under normal application, installation, use and service conditions for a period of 10 years. For detailed information see warranty terms and conditions.

As a result of ongoing research and product improvements, the specifications in this product data sheet are subject to changes without prior publication. This data sheet is not allowed to be used for deriving any rights, and AVANCIS does not accept any liability with regard to and resulting from the use of information contained herein. Installation equipment is not supplied with the product.



664 mm

1587 mm



Rear side of module with backrail system for hook-in mounting

