

Empower your facade

SKALA

KEY FEATURES

AESTHETICS

- Frameless thin-film solar module
- Without mechanical clamping on the front glass
- Rear mounting system compatible with all common façade substructures
- Particularly suitable for rear-ventilated curtain wall façades
- Matt, very homogeneous surface in terms of color

VARIATION

- Can be installed in portrait and landscape format
- Different colors and lengths
- Can be combined with a variety of other façade materials

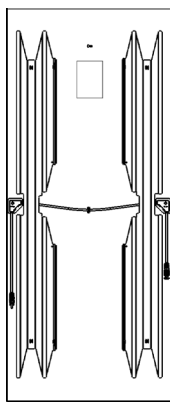
RESISTANCE

- Glass-glass construction ensures high robustness against various weather influences
- Available in standard dimensions:



664 mm

1,587 mm



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

CERTIFICATION

- 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

AVANCIS 

MECHANICAL SPECIFICATION

Valid for product variant 4.11 - Australia

Characteristic	Value
Dimensions	1,587 mm × 664 mm
Thickness	38 mm
Weight	17 kg
Cell type	CIGS
Frame	without
Front cover	3.0 mm single-pane safety glass
Design load ¹⁾ - Safety factor 1.5	upward 3,300 Pa downward 3,500 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 ² ; minimal bending radius: 6 × outer diameter
Connector type	H4 (Amphenol)
Fire rating (roof)	Class C ²⁾
Classification of fire behavior (building envelope)	B1 ³⁾ B - s2, d0 ⁴⁾

¹⁾ IEC 61730, for standard SKALA mounting

²⁾ ANSI/UL 790:2004

³⁾ DIN 4102-1:1998-05, depending on product characteristics

⁴⁾ DIN EN 13501-1:2019-05, valid for all SKALA color codes excluding B001 (can be ordered optionally)





ELECTRICAL SPECIFICATION

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

SKALA xxx ¹⁾ A0BB ¹⁾	SKALA 120	SKALA 125	SKALA 130	SKALA 135	SKALA 140	SKALA 145	SKALA 150
Nominal power P_{nom} ^{III)}	120 W	125 W	130 W	135 W	140 W	145 W	150 W
Sorting	-0/+5 W						
Module efficiency η	11.4%	11.9%	12.3%	12.8%	13.3%	13.8%	14,2%
Aperture efficiency η	12.6%	13.2%	13.7%	14.2%	14.8%	15.3%	15,8%
Open circuit voltage V_{oc} ^{III)}	89.2 V	89.2 V	89.3 V	89.3 V	89.4 V	89.4 V	89.5 V
Short circuit current I_{sc} ^{III)}	2.00 A	2.07 A	2.14 A	2.21 A	2.28 A	2.35 A	2.41 A
Voltage at mpp V_{mpp} ^{III)}	69.4 V	69.4 V	69.4 V	69.4 V	69.4 V	69.4 V	69.4 V
Current at mpp I_{mpp} ^{III)}	1.73 A	1.80 A	1.87 A	1.95 A	2.02 A	2.09 A	2.16 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 1,000 W/m², module temperature 25 °C, spectral light distribution according to atmospheric mass (AM) 1.5.¹⁾ „xxx“ corresponds to power class in Wp (in steps of 5 W)^{II)} Color code^{III)} Tolerance of manufacturing: ±5%

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

	SKALA 120	SKALA 125	SKALA 130	SKALA 135	SKALA 140	SKALA 145	SKALA 150
NMOT	40 °C						
Nominal power P_{nom}	90 W	94 W	97 W	101 W	105 W	109 W	113 W
Open circuit voltage V_{oc}	85 V	85 V	85 V	85 V	86 V	86 V	86 V
Short circuit current I_{sc}	1.60 A	1.66 A	1.71 A	1.77 A	1.82 A	1.88 A	1.93 A
Voltage at mpp V_{mpp}	66 V	66 V	66 V	66 V	66 V	66 V	66 V

** NMOT: Module operating temperature at light intensity of 800 W/m² 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/m² is 6%, compared to 1,000 W/m² at 25 °C module temperature and spectrum AM 1.5. At 500 W/m², the relative increase of module efficiency is +1%.

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.

PACKAGING INFORMATION

For packaging of SKALA-modules of standard size*	
Size including pallet (L × W × H)	1,650 mm × 800 mm × 1,000 mm
Approx. gross weight (full box)	435 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 for SKALA Short and on individual request



AVANCIS GmbH
Solarstraße 3, 04860 Torgau | Germany
Telefon +49 (0) 3421 7388-0
sales@avancis.de
www.avancis.de
www.skalafacade.com

SKALA color code (a0bb)	Available power classes (xxx)
B001	145 W, 150 W
G001	145 W, 150 W
G002	135 W, 140 W
G004	120 W, 125 W
3001	135 W, 140 W
3002	125 W
4001	125 W
4002	135 W
7002	135 W
7003	135 W
7004*	135 W

*Placement in performance class subject to reservation

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.

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.