

SKALA

FOR SOLAR FACADES



SKALA

- is a 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 – approved according to all relevant certifications
- is available in different colors and lengths:



SKALA

Valid for product variant 4.6

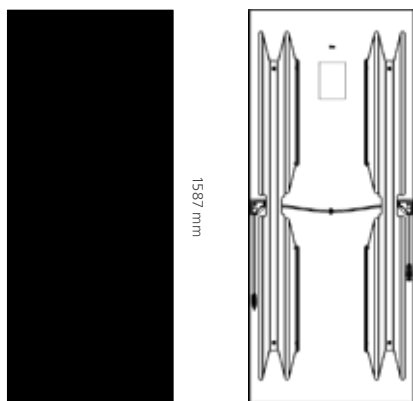
MECHANICAL SPECIFICATION

SKALA	Value
Dimensions	1587 mm x 664 mm
Thickness	38 mm
Weight	17 kg
Cell type	CIGS
Frame	none
Front cover	3.2 mm single-pane safety glass
Design load ¹⁾ (safety factor 1.5)	upward 3300 Pa downward 3500 Pa
Junction box protection class	IP67
Dimensions of junction box	60 mm x 60 mm x 11.5 mm
Cable lengths (⊖ plug ⊕ socket)	200 mm 320 mm
Cable cross section	2.5 mm ² minimal bending radius: 6x outer diameter
Connector type	H4
Fire rating (roof)	Class C (ANSI/UL 790:2004)
Classification of fire behavior (building envelope)	B1 (DIN 4102-1:1998-05) ²⁾ B - s2, d0 (DIN EN 13501-1:2019-05) ³⁾

- 1) according to IEC 61730, for standard SKALA mounting
 2) valid in Germany
 3) valid for all SKALA color codes excluding B001, B001: can be ordered optionally



- Design qualification and type approval: IEC 61215:2016
- Safety qualification: IEC 61730:2016
- Salt mist corrosion: IEC 61701
- German general building approval (abZ): Z-70.1-224



664 mm

1587 mm

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

ELECTRICAL SPECIFICATION

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

SKALA color code	3002 4001 G004	3001 4002 7003	B001 G001
Nominal power P_{nom}^*	120 W	130 W	140 W
Sorting	-0/+10 W		
Module efficiency η	11.4 %	12.3 %	13.3 %
Aperture efficiency η	12.6 %	13.7 %	14.8 %
Open circuit voltage V_{oc}^*	89.2 V	89.3 V	89.4 V
Short circuit current I_{sc}^*	2.00 A	2.14 A	2.28 A
Voltage at mpp V_{mpp}^*	69.4 V	69.4 V	69.4 V
Current at mpp I_{mpp}^*	1.73 A	1.87 A	2.02 A
Max. over-current protection I_r	4.0 A		
Max. system voltage V_{sys}	1000 V		

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

STC: Irradiance 1000 W/m², module temperature 25 °C, spectral light distribution according to atmospheric mass (AM) 1.5.

* Tolerance of manufacturing: -5 %/+10 %.

Temperature coefficients:

SKALA	Value
Temperature coefficient P_{nom}	-0.39 %/°C
Temperature coefficient V_{oc}	-230 mV/°C
Temperature coefficient I_{sc}	0 mA/°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 1000 W/m² at 25° C module temperature and spectrum AM 1.5. At 500 W/m², the relative increase of module efficiency is +1 %.

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Standard packaging:

Packaging information	
Size including pallet (LxWxH)	1650 mm x 800 mm x 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 (3x8+3x8)
Max. 40 ft container load (24 t)	28 (1x14+1x14)

Variation of packaging size on individual request



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