

SKALA High

your ideas beyond limits

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 in high-rise buildings
- 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

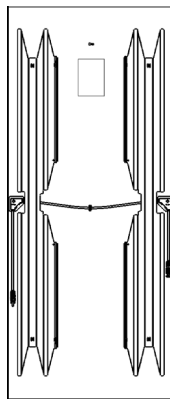
RESISTANCE

- 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
- Salt mist corrosion: IEC 61701:2011
- German general building approval (abZ): Z-70.1-224
- WEEE number: DE33274866



MADE IN GERMANY



MECHANICAL SPECIFICATION

Valid for product variant SKALA S 4.9

Characteristic	Value
Dimensions	1,587 mm × 664 mm
Thickness	39 mm
Weight	20 kg
Cell type	CIGS
Frame	without
Front cover	4.0 mm single-pane safety glass
Design load ¹⁾ - Safety factor 1.5	upward 4,400 Pa downward 6,000 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 ²⁾ S						
Nominal power P _{nom} ³⁾	125 W	130 W	135 W	140 W	145 W	150 W
Sorting	-0/+5 W					
Module efficiency η	11.9%	12.3%	12.8%	13.3%	13.8%	14.2%
Aperture efficiency η	13.2%	13.7%	14.2%	14.8%	15.3%	15.8%
Open circuit voltage V _{OC} ⁴⁾	89.2 V	89.3 V	89.3 V	89.4 V	89.4 V	89.5 V
Short circuit current I _{SC} ⁴⁾	2.07 A	2.14 A	2.21 A	2.28 A	2.35 A	2.41 A
Voltage at mpp V _{mpp} ⁴⁾	69.4 V	69.4 V	69.4 V	69.4 V	69.4 V	69.4 V
Current at mpp I _{mpp} ⁴⁾	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}	1,000 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)²⁾ Color code³⁾ Tolerance of manufacturing: ±5%

Temperature coefficient	Value
Temperature coefficient P _{nom}	-0.35%/°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 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%.

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SKALA color code (a0bb)	Available power classes (xxx)
B001	145 W, 150 W
G001	145 W, 150 W
G002	135 W, 140 W
G004	125 W
3001	135 W, 140 W
3002	125 W
4001	125 W
4002	130 W, 135 W
7002	135 W, 140 W
7003	130 W, 135 W
7004*	135 W, 140 W

*Placement in performance class subject to reservation

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

