

## **KEY FEATURES**

## **AESTHETICS**

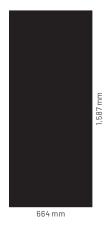
- Frameless thin-film solar module
- Without mechanical clamping on the front glass
- Rear mounting system compatible with all common façade substructures
- Particularly suitable for rear-ventilated curtain wall façades
  Matt, very homogeneous surface in terms of color

# 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:





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 4.9

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 <sup>1)</sup> - 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 mm²; minimal bending radius: 6 × outer diameter
Connector type	H4(Amphenol)
Fire rating (roof)	Class C <sup>2)</sup>
Classification of fire behavior (building envelope)	B1 <sup>3)</sup> B - s2, d0 <sup>4)</sup>

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

<sup>2)</sup>ANSI/UL 790:2004

<sup>3)</sup> DIN 4102-1:1998-05, depending on product characteristics

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

Anthracit G001

Black B001

Light Bl 7004

# **ELECTRICAL SPECIFICATION**

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

SKALA xxx <sup>1)</sup> a0bb <sup>11)</sup>						
Nominal power P <sub>nom</sub> <sup>III)</sup>	125 W	130 W	135 W	140 W	145 W	150 W
Sorting	-0/+5W					
Module efficiency $\boldsymbol{\eta}$	11.9%	12.3%	12.8%	13.3%	13.8%	14,2%
Aperture efficiency $\eta$	13.2%	13.7%	14.2%	14.8%	15.3%	15,8%
Open circuit voltage $V_{oc}^{(III)}$	89.2 V	89.3 V	89.3 V	89.4 V	89.4 V	89.5 V
Short circuit current $I_{sc}^{(III)}$	2.07 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
Current at mpp I mpp <sup>III)</sup>	1.80 A	1.87 A	1.95 A	2.02 A	2.09 A	2.16 A
Max. overcurrent protection ${\rm I_{\rm R}}$	4.0 A					
Max. system voltage $\rm V_{_{\rm sys}}$	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.

 $^{\mbox{\tiny I}\mbox{\tiny I}}$  ,xxx" corresponds to power class in Wp (in steps of 5 W)

<sup>II)</sup> Color code

")Tolerance of manufacturing: ±5%

Temperature coefficient	Value
Temperature coefficient P <sub>nom</sub>	-0.35%/°C
Temperature coefficient $V_{oc}$	-230 mV/°C
Temperature coefficient $I_{_{\rm SC}}$	0 mA/°C

Data measured at low light intensity:

The relative reduction of the module efficiency at a light intensity of  $200 \text{ W/m}^2$  is 6%, compared to 1,000 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%.

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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

 $^{*)}\mbox{Placement}$  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)	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 for SKALA Short on individual request



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