

SOLON SOLskin.

*Photovoltaic system
for architectural integration.*

- › Innovative application for architectural integration
- › Ideal for all roof and tile types
- › Adaptable to all solar array shapes
- › Quick and easy installation
- › Ventilated system
- › Suitable for use with standard SOLON modules
- › 10 year guarantee on the entire system



Integration system. Maximum efficiency and exclusive aesthetics.

The revolutionary SOLON SOLskin architectural integration system combines the high efficiency of SOLON modules with an innovative architectural integration structure, which guarantees full integration and complete waterproofing of the roof.

Installation is particularly easy and the modules can be removed or replaced individually to speed up construction and maintenance times.

Maximum Efficiency.

- › The latest, high-efficiency monocrystalline and polycrystalline cell technology
- › Excellent low light performance
- › Improved output due to positive sorting of power classes (0 to +4.99 Wp)
- › PID-free products with guaranteed performance stability
- › Ventilated system for perfect air circulation

Quick and easy installation and removal.

- › Easy to handle: light weight and small size for easy transportation
- › Suitable for any photovoltaic array shape
- › Easy replacement and maintenance of the system: each module can be replaced independently

Watertight and weather resistant.

- › Designed to fit all roof types with an inclination of 10° to 50°
- › The innovative integration structure of the modules is designed to guarantee a watertight and waterproof roof covering.
- › The system is resistant to UV rays, hail, rust, heat, snow and wind

Highest Quality components.

- › All system components meet SOLON's high quality criteria
- › CSTB certified integration system
- › 100% recyclable system
- › Available also in total black version with SOLON 230/02 modules

SOLON Advantages

- › 10-year product warranty¹⁾
- › 5-level performance guarantee for 25 years¹⁾
- › Positive sorting of power classes (0 to +4.99 Wp)

1) According to SOLON Product and Performance Guarantee.

SOLON 220/16

SOLON Black 220/16 (monocrystalline)



Electrical data – typical (STC)

STC (Standard Test Conditions): 1,000 W/m², (25 ± 2)°C, AM 1.5 in accordance with EN 60904-3

Power rating	P_{max}	265 Wp ¹⁾	260 Wp ¹⁾	255 Wp	250 Wp	245 Wp	240 Wp
Module efficiency		16,16%	15,85%	15,55%	15,24%	14,94%	14,63%
Rated voltage	U_{mpp}	30,7 V	30,5 V	30,2 V	30,0 V	29,8 V	29,6 V
Rated current	I_{mpp}	8,67 A	8,57 A	8,45 A	8,34 A	8,22 A	8,11 A
Open circuit voltage	U_{oc}	38,1 V	37,8 V	37,5 V	37,3 V	37,0 V	36,8 V
Short circuit current	I_{sc}	9,01 A	8,92 A	8,83 A	8,74 A	8,65 A	8,56 A
Maximum reverse current	I_r	20 A	20 A	20 A	20 A	20 A	20 A
Maximum system voltage		1.000 V	1.000 V	1.000 V	1.000 V	1.000 V	1.000 V

Measuring tolerance for P_{max} : ± 3%

Reduction of module efficiency from 1,000 W/m² to 200 W/m²: < 4 %

Electrical data – typical (NOCT)

NOCT (Nominal Operating Cell Temperature): 800 W/m², NOCT, AM 1.5

Power rating	P_{max}	190 Wp	186 Wp	183 Wp	179 Wp	176 Wp	172 Wp
Rated voltage	U_{mpp}	27,5 V	27,3 V	27,1 V	26,9 V	26,7 V	26,6 V
Rated current	I_{mpp}	6,92 A	6,83 A	6,75 A	6,66 A	6,57 A	6,48 A
Open circuit voltage	U_{oc}	34,4 V	34,2 V	33,9 V	33,7 V	33,5 V	33,2 V
Short circuit current	I_{sc}	7,27 A	7,20 A	7,13 A	7,06 A	6,98 A	6,91 A

Thermal data

Tc of open circuit voltage -0,33% /K

Tc of short circuit current 0,04% /K

Tc of power -0,43% /K

NOCT (according to IEC 61215) 48°C ± 2°C

Measuring tolerance for all final data: ± 10 % (except P_{max} (STC) and NOCT)

SOLON Blue 220/16 (polycrystalline)



Electrical data – typical (STC)

STC (Standard Test Conditions): 1,000 W/m², (25 ± 2)°C, AM 1.5 in accordance with EN 60904-3

Power rating	P_{max}	255 Wp ¹⁾	250 Wp	245 Wp	240 Wp	235 Wp	230 Wp
Module efficiency		15,55%	15,24%	14,94%	14,63%	14,33%	14,02%
Rated voltage	U_{mpp}	30,5 V	30,3 V	30,1 V	29,9 V	29,8 V	29,6 V
Rated current	I_{mpp}	8,40 A	8,28 A	8,16 A	8,03 A	7,90 A	7,78 A
Open circuit voltage	U_{oc}	37,5 V	37,4 V	37,2 V	37,0 V	36,9 V	36,7 V
Short circuit current	I_{sc}	8,83 A	8,71 A	8,59 A	8,47 A	8,36 A	8,24 A
Maximum reverse current	I_r	20 A	20 A	20 A	20 A	20 A	20 A
Maximum system voltage		1.000 V	1.000 V	1.000 V	1.000 V	1.000 V	1.000 V

Measuring tolerance for P_{max} : ± 3%

Reduction of module efficiency from 1,000 W/m² to 200 W/m²: < 5 %

Electrical data – typical (NOCT)

NOCT (Nominal Operating Cell Temperature): 800 W/m², NOCT, AM 1.5

Power rating	P_{max}	186 Wp	182 Wp	178 Wp	175 Wp	171 Wp	167 Wp
Rated voltage	U_{mpp}	27,8 V	27,6 V	27,4 V	27,3 V	27,1 V	26,9 V
Rated current	I_{mpp}	6,69 A	6,60 A	6,51 A	6,41 A	6,32 A	6,22 A
Open circuit voltage	U_{oc}	34,3 V	34,1 V	34,0 V	33,8 V	33,7 V	33,5 V
Short circuit current	I_{sc}	7,17 A	7,07 A	6,97 A	6,88 A	6,79 A	6,69 A

Thermal data

Tc of open circuit voltage -0,32% /K

Tc of short circuit current 0,05% /K

Tc of power -0,41% /K

NOCT (according to IEC 61215) 46°C ± 2°C

Measuring tolerance for all final data: ± 10 % (except P_{max} (STC) and NOCT)

¹⁾ Available in limited amounts upon request.

SOLON 220/16

SOLON Black 220/16 and SOLON Blue 220/16

Mechanical specifications

Dimensions (H x W x D)	1,640 x 1,000 x 34 mm
Weight	18.2 kg
Junction box	1 junction box with 3 bypass diodes (IP65)
Cable	Solar cable, length 1,000 mm, 4 mm ² , prefabricated with MC4-combinable plug (IP67)
Application class	Application class A (according to IEC 61730)
Front glass	Transparent toughened safety glass, 3.2 mm
Photovoltaic cells	60 cells, monocrystalline or polycrystalline Si 6.2" (156 x 156 mm)
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Back side	Composite film
Frame	Anodized aluminum frame with twin-wall profile and drainage holes
Architectural integration system	UV proof P.P.

Permissible operating conditions

Temperature range	- 40°C to + 85°C
Architectural integration system's temperature range	- 50° to + 130°
Maximum surface load capacity	Tested up to 5,400 Pa according to IEC 61215 (advanced test)
Resistance against hail	Maximum diameter of 25 mm with impact speed of 83 km/h

Guarantees and certifications

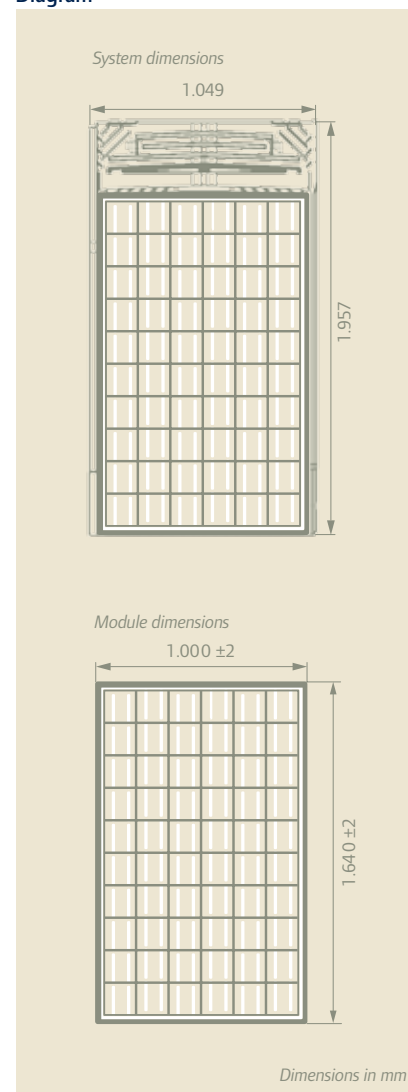
Product guarantee	10 years ²⁾
Performance guarantee	Guaranteed output of 95 % for 5 years, 90 % for 10 years, 87 % for 15, 83 % for 20 years and 80 % for 25 years ²⁾
Approvals and certificates	IEC 61215 Edition II, IEC 61730 (incl. Safety Class II), IEC 62716 (Ammonia resistance), IEC 68-2-52 (Salt mist resistance), MCS

This datasheet complies with the requirements of EN 50380:2003. Subject to modifications.

Electrical data without guarantee. SOLON is certified to ISO 9001, ISO 14001 and OHSAS 18001.

²⁾ According to SOLON Product and Performance Guarantee

Diagram



CEC Approved



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