

SOLON SOLitaire.

Fully Integrated Rooftop System.



- › Integrated mounting system for simple and quick installation
- › Synthetic frame for secure waterproofing of the roof
- › Suitable for roofs with an inclination between 10° and 60° ¹⁾
- › Compatible with most common roofing materials
- › Power classes up to 260 Wp

Made in Germany

In cooperation with



Bayer MaterialScience

SOLON



In-Roof System for Maximum Output.

The new SOLON SOLitaire offers numerous advantages: thanks to its powerful SOLON Black 250/05 and SOLON Blue 250/05 modules, only a small roof area is required for a standard residential system. Installation is especially quick and easy since no traditional substructure is needed – the modules are flush with the roof. Another plus: the fully integrated system is suitable for most common roofing materials.

Maximum Efficiency.

- › The SOLON Black 250/05 and SOLON Blue 250/05 modules deliver excellent efficiency
- › Exceptional outputs of up to 260 Wp
- › Module size, including synthetic frame, is only 1.9 m²
- › Maximum output on a limited area; just 25 m² for a 3 kWp system

Easy to Install.

- › The synthetic framed modules are delivered with all necessary screws, seals and metal sheeting
- › Modules are screwed directly to the counter battening
- › No need for additional substructures, aluminum rails, or module clamps

100% Waterproof.

- › SOLON SOLitaire is suitable for almost any roof inclination
- › From 22°¹⁾, no additional sealing on insulation measures
- › Modules form a water-carrying layer, and together with the synthetic frame this guarantees 100% water resistance

High-Quality Components.

- › All system components comply with SOLON's strict quality criteria
- › Synthetic frame withstands extreme loads, is weather- and UV-resistant, developed in collaboration with Bayer MaterialScience

SOLON Advantages:

- › 10-year product warranty¹⁾
- › 5-stage performance guarantee over 25 years¹⁾
- › SOLON solar insurance included²⁾
- › Positive sorting of power classes (0 to + 4.99 Wp)
- › Free module recycling

¹⁾ According to SOLON Product and Performance Guarantee.

²⁾ Valid for the countries of the European Union and Switzerland.

¹⁾ If the roof inclination is between 10° and 22°, then additional sealing is required in order to insure waterproofing.

SOLON SOLitaire

High-performance system components.

SOLON Black 250/05

(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

	P_{max}	260 Wp ²⁾	255 Wp	250 Wp	245 Wp	240 Wp
Capacity rating						
Module efficiency		15.85 %	15.55 %	13.43 %	13.16 %	12.90 %
Rated voltage	V_{mpp}	30.45 V	30.24 V	30.03 V	29.82 V	29.62 V
Rated current	I_{mpp}	8.57 A	8.45 A	8.34 A	8.22 A	8.11 A
Open circuit voltage	V_{OC}	37.80 V	37.53 V	37.27 V	37.01 V	36.75 V
Short circuit current	I_{SC}	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
Maximum system voltage		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

	P_{max}	186 Wp	183 Wp	179 Wp	176 Wp	172 Wp
Capacity rating						
Rated voltage	V_{mpp}	27.29 V	27.11V	26.92 V	26.73 V	26.55 V
Rated current	I_{mpp}	6.83 A	6.75 A	6.66 A	6.57 A	6.48 A
Open circuit voltage	V_{OC}	34.16 V	33.92 A	33.69 V	33.45 V	33.22 V
Short circuit current	I_{SC}	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 250/05

(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

	P_{max}	260 Wp ²⁾	255 Wp	250 Wp	245 Wp	240 Wp
Capacity rating						
Module efficiency		15.85 %	15.55 %	13.43 %	13.16 %	12.90 %
Rated voltage	V_{mpp}	30.67 V	30.49 V	30.30 V	30.12 V	29.94 V
Rated current	I_{mpp}	8.52 A	8.40 A	8.28 A	8.16 A	8.03 A
Open circuit voltage	V_{OC}	37.70 V	37.53 V	37.38 V	37.20 V	37.03 V
Short circuit current	I_{SC}	8.95 A	8.83 A	8.71 A	8.59 A	8.47 A
Maximum reverse current	I_R	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

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

	P_{max}	190 Wp	186 Wp	182 Wp	178 Wp	175 Wp
Capacity rating						
Rated voltage	V_{mpp}	27.91 V	27.75 V	27.57 V	27.41 V	27.25 A
Rated current	I_{mpp}	6.78 A	6.69 A	6.60 A	6.51 A	6.41 A
Open circuit voltage	V_{OC}	34.42 V	34.27 V	34.13 V	33.97 V	33.81 V
Short circuit current	I_{SC}	7.27 A	7.17 A	7.07 A	6.97 A	6.88 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)

²⁾ Available in limited amounts upon request.

SOLON SOLitaire

SOLON Black 250/05 and SOLON Blue 250/05.

Mechanical specifications

Dimensions (H x W x D)	1,044 x 1,783 x 27 mm
Weight	22.5 kg ± 1 kg
Junction box	1 junction box with 3 bypass diodes
Cable	Solar cable, length 1,000 mm, 4 mm ² , prefabricated with MC4-combinable plug
Application class	Class A at IEC 61730
Front Glas	Transparent toughened safety glass, 4 mm
Solar cells	60 cells, mono or polycrystalline Si 6.2" (156 x 156 mm)
Back side	Composite film
Frame	Polyurethane frame

Permissible operating conditions

Temperature range	-40°C to +85°C
Maximum surface load capacity	Advanced test up to 5,400 Pa according to IEC 61215
Resistance against hail	Maximum diameter of 25 mm with impact speed of 83 km/h

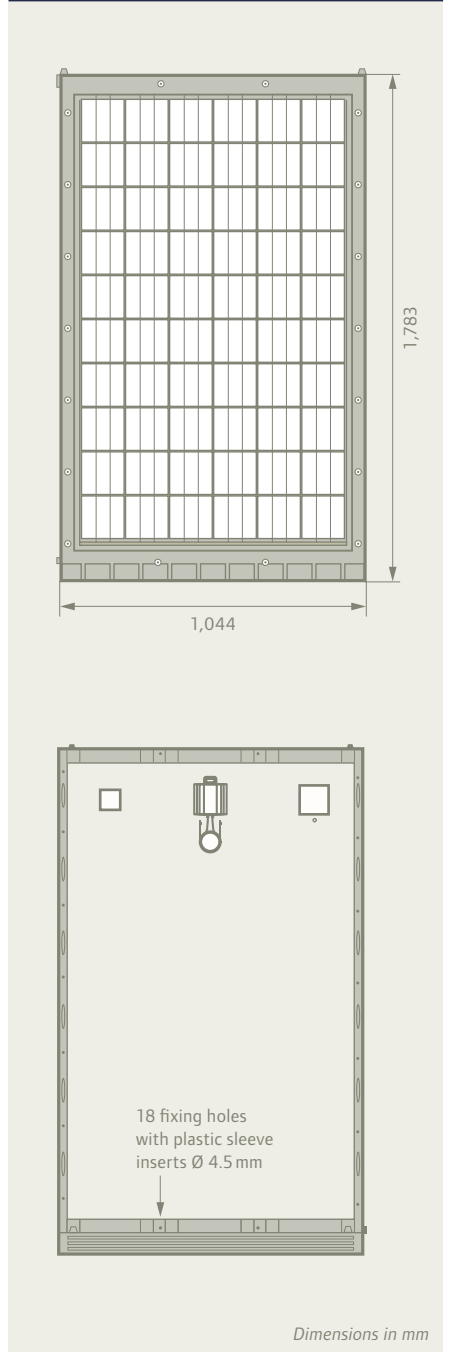
Guarantees and certifications

Product guarantee	10 years ³⁾
Performance guarantee	Guaranteed output of 95 % for 5 years, 90 % for 10 years, 87 % for 15 years, 83 % for 20 years and 80 % for 25 years ³⁾
Approvals and certificates	Qualification according to IEC 61215 Edition II, IEC 61730 (incl. Safety Class II), CSTB: DIN V ENV 1187 (B _{ROOF} t3), Fire class C (Fire resistance), IEC 68-2-52 (Salt mist resistance), MCS

This datasheet complies with the requirements of EN 50380:2003. Subject to modifications and omissions. Electrical data without guarantee.

³⁾ According to SOLON Product and Performance Guarantee.

Drawing



CEC Approved

