

# SOLON Black 230/07

Monocrystalline solar modules.

- > Recognized SOLON quality
- > High-performance modules with excellent efficiency
- > Optimal output over decades
- > Very good low light response
- > 10 year product guarantee, 25 year performance quarantee
- > SOLON solar insurance



## SOLON Black 230/07

#### Technical features:

- · Highly efficient monocrystalline cell technology
- Module efficiency of up to 15.2%
- · Excellent low light response
- 4 mm solar glass and twin-wall frame profile for highest load capacity
- Innovative SOLON connection technology for optimum heat dissipation

#### SOLON advantages:

- SOLON solar insurance for rooftop installations included 1)
- 10 year product quarantee, 25 year performance quarantee
- Individual consulting and support from our service team and our international distribution partners

Drawing

- · On time delivery
- · Free module recycling
- · Certified quality products (TÜV)

#### Electrical data - typical

Capacity rating (±3 %)	$P_{\text{max}}$	250 Wp <sup>2)</sup>	245 Wp	240 Wp	235 Wp	230 Wp	225 Wp
Module efficiency		15.24%	14.94%	14.63%	14.33%	14.02%	13.72%
Rated voltage	$U_{mpp}$	30.03 V	29.82 V	29.62 V	29.41 V	29.20 V	29.00 V
Rated current	I <sub>mpp</sub>	8.34 A	8.22 A	8.11 A	7.99 A	7.88 A	7.76 A
Open circuit voltage	$U_{oc}$	37.27 V	37.01 V	36.75 V	36.48 V	36.22 V	35.96 V
Short circuit current	I <sub>sc</sub>	8.74 A	8.65 A	8.56 A	8.47 A	8.38 A	8.29 A

The above values are effective for an irradiation of  $1,000 \, \text{W/m}^2$ , AM  $1.5 \, \text{and}$  a cell temperature of  $25 \, ^{\circ}\text{C}$  according to STC. They are subject to production tolerances. The modules can be delivered with their characteristic data series which have to be used for the detailed system configuration.

## Temperature coefficient (Tc)

Tc of open circuit voltage	-0.37 %/K
Tc of short circuit current	0.03 %/K
Tc of power	-0.51%/K

### Mechanical specification

Dimensions (H x W x D)	1,640 x 1,000 x 42 mm
Weight	23.5 kg
Junction box	1 SOLON junction box with 3 bypass diodes
Cable	Solar cable, length 900 mm, 4 mm², prefabricated with plug, type MC-4
Application class	Class A at IEC 61730
Front glass	Transparent toughened safety glass, 4 mm
Solar cells	60 cells, monocrystalline 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

#### Permissible operating conditions

Temperature range	-40°C to +85°C
NOCT	47°C ±2°C
Maximum system voltage	1,000 V
Maximum surface load capacity	Tested up to 5,400 Pa according to IEC 61215 (advanced test)
Resistance against hail	Maximum diameter of 28 mm with impact speed of 86 km/h

#### Guarantees and certifications

Product warranty	10 years
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
Approvals and certificates	TÜV: IEC 61215 Edition II, IEC 61730 (incl. Safety Class II)

Frame with drainage holes

4 holes for potential equalization Ø 4.5 mm

Glass

SOLON frame profile

37

Dimensions in mm









Your specialty retailer

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