

# SOLON Blue 230/07

Polycrystalline solar modules.



- › Highly efficient polycrystalline cell technology
- › Module efficiency of up to 15.2 %
- › Positive binning of power classes (0 to + 4.99 Wp)
- › 4 mm solar glass and twin-wall frame profile for highest load capacity
- › SOLON solar insurance for rooftop installations included <sup>1)</sup>
- › 10 year product guarantee and a 5-stage performance guarantee
- › Free module recycling



# SOLON Blue 230/07

## Electrical data – typical (STC)

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

Capacity rating	P <sub>max</sub>	250 Wp <sup>2)</sup>	245 Wp	240 Wp	235 Wp	230 Wp	225 Wp	220 Wp	214 Wp
Module efficiency		15.24%	14.94%	14.63%	14.33%	14.02%	13.72%	13.41%	13.05%
Rated voltage	U <sub>mpp</sub>	30.30 V	30.12 V	29.94 V	29.76 V	29.58 V	29.40 V	29.23 V	29.00 V
Rated current	I <sub>mpp</sub>	8.28 A	8.16 A	8.03 A	7.90 A	7.78 A	7.65 A	7.53 A	7.38 A
Open circuit voltage	U <sub>OC</sub>	37.38 V	37.20 V	37.03 V	36.86 V	36.69 V	36.52 V	36.35 V	36.13 V
Short circuit current	I <sub>SC</sub>	8.71 A	8.59 A	8.47 A	8.36 A	8.24 A	8.12 A	8.00 A	7.86 A
Maximum reverse current	I <sub>R</sub>	15 A	15 A	15 A	15 A	15 A	15 A	15 A	15 A
Maximum system voltage		1,000 V	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V

Measuring tolerance for P<sub>max</sub>: ±3%

Reduction of module efficiency from 1,000 W/m<sup>2</sup> to 200 W/m<sup>2</sup>: < 5%

## Electrical data – typical (NOCT)

NOCT (Normal Operating Cell Temperature): 800 W/m<sup>2</sup>, NOCT, AM 1.5

Capacity rating	P <sub>max</sub>	182 Wp	178 Wp	175 Wp	171 Wp	167 Wp	164 Wp	160 Wp	156 Wp
Rated voltage	U <sub>mpp</sub>	27.57 V	27.41 V	27.25 A	27.08 V	26.92 V	26.75 V	26.60 V	26.39 V
Rated current	I <sub>mpp</sub>	6.60 A	6.51 A	6.41 A	6.32 A	6.22 A	6.12 A	6.02 A	5.90 A
Open circuit voltage	U <sub>OC</sub>	34.13 V	33.97 V	33.81 V	33.66 V	33.50 V	33.35 V	33.19 V	32.99 V
Short circuit current	I <sub>SC</sub>	7.07 A	6.97 A	6.88 A	6.79 A	6.69 A	6.59 A	6.49 A	6.38 A

## Temperature coefficients (Tc)

Tc of open circuit voltage	-0.35%/K
Tc of short curcuit current	0.07%/K
Tc of power	-0.45%/K

Measuring tolerance for all final data: ±10% (except P<sub>max</sub> (STC) and NOCT)

## 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 1,000 mm, 4 mm <sup>2</sup> , prefabricated with MC4-combinable plug
Application class	Class A at IEC 61730
Front glass	Transparent toughened safety glass, 4 mm
Solar cells	60 cells, polycrystalline Si 6.2" (156 x 156 mm)
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Back side	Composite film
Frame	Anodised aluminium frame with twin-wall profile and drainage holes

## Permissible operating conditions

Temperature range	-40°C to +85°C
NOCT	46°C ± 2°C
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 230 km/h

## Guarantees and certifications

Product warranty	10 years <sup>3)</sup>
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 <sup>3)</sup>
Approvals and certificates	TÜV: IEC 61215 Edition II, IEC 61730 (incl. Safety Class II)

## Drawing

