



Available
as of quarter
III/2010

SOLON Black 280/12

PV system specifically designed for metal roofs.



- > Low static load, only 8.5 kg/m²
- > Assembly without roof penetration
- > Optimized assembly time by adhering modules to the roof
- > Excellent area efficiency
- > Optimal use of the roof area
- > System statics tested according to DIN 1055

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Technical features:

- Highly efficient monocrystalline cell technology
- Module efficiency of up to 14.6%
- Weight-optimized, 8,5 kg/m²
- Excellent low-light response
- Frameless module design

SOLON advantages:

- SOLON solar insurance for rooftop installations included ¹⁾
- 10 year product guarantee, 25 year performance guarantee
- 20 years guarantee on bonding
- On time delivery
- Free module recycling
- Certified quality products (TÜV)

Electrical data – typical

Capacity rating (±3%)	P _{max}	285 Wp ²⁾	280 Wp	275 Wp	270 Wp	265 Wp ²⁾
Module efficiency		14.55%	14.29%	14.04%	13.78%	13.68%
Rated voltage	U _{mpp}	35.40 V	35.20 V	35.00 V	34.80 V	34.60 V
Rated current	I _{mpp}	8.06 A	7.96 A	7.86 A	7.76 A	7.66 A
Open circuit voltage	U _{oc}	43.96 V	43.69 V	43.42 V	43.15 V	42.89 V
Short circuit current	I _{sc}	8.51 A	8.44 A	8.36 A	8.29 A	8.21 A

The above values are effective for an irradiation of 1,000 W/m², AM 1.5 and a cell temperature of 25°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 coefficients (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)	1,973 x 993 x 4.5 mm
Weight	16.5 kg
Junction box	1 box with 3 bypass diodes
Cable	Solar cable, length 1,000 mm, 4 mm ² , prefabricated with plug, type MC-4
Application class	Class A at IEC 61730
Front glass	Transparent toughened safety glass, 3,2 mm
Solar cells	72 cells, monocrystalline Si 6.2" (156 x 156 mm)
Cell encapsulation	EVA (Ethylene Vinyl Acetate)
Back side	Composite film

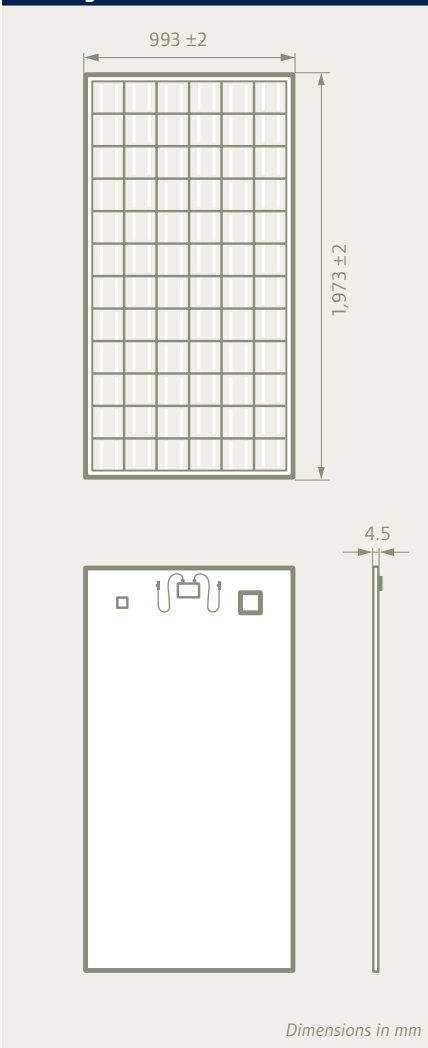
Permissible operating conditions

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)

Drawing



Your specialty retailer

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