



SOLON Black 160/05

PV system for roof integration.

Winner
Innovation Award'09

24th PV symposium/Bad Staffelstein, Germany



- › Roof integration system that fulfils highest aesthetical demands
- › Simple and quick mounting
- › Reliable waterproofing
- › 25 year SOLON performance guarantee
- › SOLON solar insurance

In cooperation with



BaySystems

SOLON

*Don't leave the planet
to the stupid*

SOLON Black 160/05

Technical features:

- Integrated mounting system for simple and quick installation
- Compatible with most common roof coverings
- Synthetic framing system for secure waterproofing of the roof
- Suitable for roofs with an inclination between 22° and 60°*
- Monocrystalline cell technology
- Module efficiency of up to 14.1 %

* If the roof inclination is less than 22 degrees additionally sealing is required in order to insure waterproofing

SOLON advantages:

- SOLON Solar insurance for rooftop installations included**
- 25 year SOLON performance guarantee
- Individual consulting and support from our service team and our international distribution and partners
- On time delivery
- Free module recycling
- Certified quality products (TÜV)

** Germany, Spain, Italy, Denmark, Poland, Czech Republic, Austria, Switzerland, France, Luxembourg, Belgium, Netherlands, Finland, Sweden

Electrical specifications – typical

Capacity rating (± 3%)	P _{max}	180 Wp	175 Wp	170 Wp	165 Wp	160 Wp	155 Wp
Module efficiency		14.06%	13.67%	13.28%	12.89%	12.50%	12.11%
Rated voltage	U _{mpp}	36.30 V	36,20 V	36.10 V	36.00 V	35.90 V	35.80 V
Rated current	I _{mpp}	4.95 A	4.85 A	4.70 A	4.60 A	4.45 A	4.35 A
Open circuit voltage	U _{oc}	44.60 V	44.50 V	44.30 V	44.15 V	44.00 V	43.90 V
Short circuit current	I _{sc}	5.30 A	5.20 A	5.05 A	4.95 A	4.80 A	4.70 A

The above values are effective for an irradiation of 1.000 W/m², AM 1.5, and a cell temperature of 25 °C (standard test conditions). 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

Tk of open circuit voltage	-0.31 %/K
Tk of short circuit current	0.03 %/K
Tk of power	-0.42 %/K

Mechanical specification

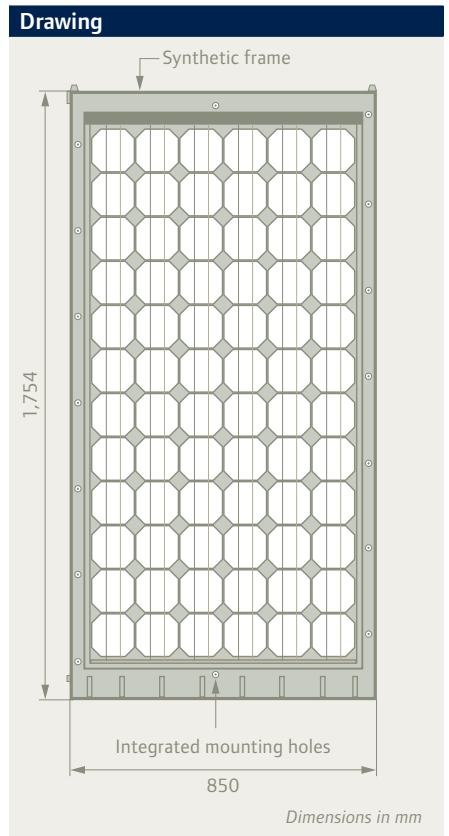
Dimensions (HxBxD)	1,754 x 850 x 27 mm
Weight	19.5 kg (± 1 kg)
Junction Box	1 junction box with 3 bypass diodes
Cable	Solar cable, length 1,500 mm, 4 mm ² , connectors prefabricated with MC 4 plug
Front glass	White toughened safety glass, 4 mm
Solar cells	72 pcs. monocrystalline Si 5" (125 mm x 125 mm)
Back site	Black composite foil
Frame	Polyurethane frame

Operating conditions

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

Guarantees and certifications

Product warranty	2 years
Performance guarantee	Guaranteed output of 90% for 10 years and 80% for 25 years
Approvals and certificates	TÜV: IEC 61215 Edition II, IEC 61730



Your specialty retailer

For more information on SOLON products visit us on www.solon.com. We are glad to inform you personally as well.

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