CONERGY

Conergy PowerPlus 175MC-185MC

Thanks to their compact dimensions, Conergy PowerPlus solar modules with 48 cells provides highly flexible installation. Conergy PowerPlus modules stand for reliably high yields and long service life. The positive performance tolerance and outstanding weak-light properties enable more electricity to be produced during system operation. In addition, comprehensive product and extended performance guarantees ensure a secure investment.





High yields in practical use

- High-performance modules with mono-crystalline 3-busbar cell technology from our own production plant
- High efficiency even under weak-light conditions
- Up to 2.5% more module output thanks to positive performance tolerance
- High yield security thanks to comprehensive performance guarantees for 25 years ¹

Premium quality for a long service life

- High-quality, fully automatic, quality-tested production "Made in Germany"
- Safe junction box and frost resistant frame
- High stability, e.g. with regard to snow and wind pressure
- Resistant to all weather conditions and to salt mist and ammonia vapours
- Up to 10-year product warranty 1

Planning flexibility

- | Especially recommended for all roof systems, even with small areas
- Optimum area utilisation thanks to compact dimensions
- Approved for upright and crosswise installation

Easy to install

- Convenient transport due to compact format and low module weight, making it one of the lightest modules in the performance class with a loadability of 5,400 Pascals
- Safe connection thanks to reverse polarity protected plug with twist lock

1 | Cell

The high-efficient 3-busbar cells from our own production have an optimised cell design.

3 | Junction box

The water-tight, soldered and cast junction box is especially safe and ensures maximum yields with the passively cooled 3-bypass diodes, even with unfavourable environmental conditions.

2 | Frame and glass

Whether it's wind pressure, snow loads or temperature fluctuations – the especially loadable solar glass and the twist-resistant frame without hollow cavities stand up to even the most extreme conditions.

4 | Made in Germany

The entire module development, production and quality assurance at the Conergy module production plant in Frankfurt (Oder) is certified by the German TÜV (technical inspectorate) according to ISO 9001 and 14001.





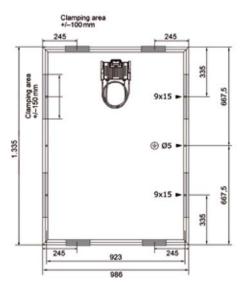




¹ According to Conergy AG's current warranty conditions.

Conergy PowerPlus 175MC-185MC





All specifications in mm

Module dimensions (L \times W \times H): ¹

Cell dimensions: No. of cells: Cell type:

NOCT: 2

Maximum permissible load:

Front cover type:

Cable:

Plug type:

Module weight: 4

Certification:

Product warranty: 5

Performance guarantee 1: 5

Performance guarantee 2: 5

Maximum permissible system voltage:

Reverse current loadability (I_R):

Frame material:

Reduction of efficiency from 1,000 W/m² to 200 W/m² in accordance with EN 60904-1: $1,335 \times 986 \times 46 \,\text{mm}$

 $156\times156~\text{mm}$

Mono-crystalline cell incorporating

3-busbar technology

 $47^{\circ}C \pm 2^{\circ}C$ 5,400 Pa 3

Micro-structured solar glass

2× 1,000 mm length, 4 mm² cross section

Huber + Suhner: plug connector with integrated twist lock

15.5 kg

IEC/EN 61215 Ed. 2, IEC/EN 61730, SK II, ISO 9001:2008, ISO 14001:2004

5 years, can be extended to 10 years

12 years, 92% of nominal output 25 years, 80 % of nominal output

1,000 V

20 A

Anodised aluminium At 200 W/m2, 96 % of STC efficiency is achieved

Conergy PowerPlus	175MC	180MC	185MC
Electrical ratings under standard test conditions: 6			
Nominal output (P _{nom})	175 W	180 W	185 W
Performance tolerance	-0/+2.5 %	-0/+2.5 %	-0/+2.5%
Module efficiency (P _{nom})	13.29%	13.67%	14.05%
Voltage at maximum performance (\mathbf{U}_{mpp}) 7	22.98 V	23.30 V	23.67 V
Current at maximum performance $(I_{mpp})^7$	7.73 A	7.84 A	7.92 A
Off-load voltage (U _{oc}) ⁷	29.03 V	29.17 V	29.40 V
Short-circuit current (I _{sc}) ⁷	8.39 A	8.42 A	8.44 A
Temperature coefficient (P _{mpp})	−0.47 % /° C	−0.47 %/° C	−0.47 %/° C
Temperature coefficient (U_{oc}), absolute	-0.099V/°C	-0.099V/°C	-0.100 V/° C
Temperature coefficient (U_{oc}), in percent	−0.34 %/° C	−0.34 %/° C	−0.34 %/° C
Temperature coefficient (I_{sc}) absolute	4.2 mA/° C	4.2 mA/° C	4.2 mA/° C
Temperature coefficient (I_{sc}) as a percentage	0.05 %/° C	0.05 %/° C	0.05 %/° C
Electrical rating at 800 W/m², NOCT and AM 1.5			
Power (P _{mpp})	129.43 W	133.20 W	136.70 W
Off-load voltage (U_{oc})	26.66 V	26.79 V	27.00 V
Short-circuit current (I _{sc})	6.82 A	6.85 A	6.86 A
Voltage (U _{mpp})	21.09 V	21.38 V	21.73 V
Current (I _{mpp})	6.14 A	6.23 A	6.29 A

This data sheet complies with the specifications of DIN EN 50380.

Supplier:



Unit 2/10

Enterprise Close West Gosford 2250

tel: 4323 9050_

Particular uneranice: +/- i min.

Nominal operating temperature of the cell at 800 W/m² irradiation, 20°C ambient temperature, wind speed of 1 m/s.

In accordance with IEC 61215 Ed. 2.

Weight tolerance: +/- 0.5 kg.

According to Conergy AG's current warranty conditions.
 Standard Test Conditions defined as follows: 1,000 W/m² radiant power

at a spectral density of AM 1.5 and a cell temperature of 25°C.

⁷ Typical production values