Conergy PowerPlus 240M-255M

Noir edition

Conergy PowerPlus solar modules offer premium quality that pays for itself. The new "noir" modules offer a noble black design with a black back sheet and a black frame. They guarantee high system yields and reliable operation over the entire term, and under the most demanding environmental and weather conditions. They are manufactured to the highest quality standards and are characterised by many well thought through details and characteristics that set standards in this combination. For this why we offer our unique PremiumPlus warranty.



High yields in practice

- High-performance modules with monocrystalline, triple busbar cell technology
- High level of efficiency, even in poor light conditions
- Up to 3 % more module output through positive performance tolerance
- High yield security thanks to linear performance guarantee for 25 years 1

Premium quality for long service life

- 12-year product warranty 1
- High-quality and quality-tested materials and TÜV-certified production
- Secure junction box and cavity-free black frame
- High stability, for example in snow, wind and hail, and now with a module load of up to 6,000 Pascal
- Resistant to all weather conditions as well as salt spray and ammonia vapours
- Free module take-back programme through PV CYCLE²

Planning flexibility

- Recommended for solar energy systems of any size and in any environment
- Optimum area utilisation with optional portrait or landscape installation

Easy to install

- Clamping areas now tested right into the corners for even more flexible installation
- Simple transport one of the lightest modules of the performance class, with a load capacity of 6,000 Pascal
- Secure installation thanks to reverse polarity protected plugs with twist lock

1 | More output

High level of performance, with up to 255 Wp rated capacity and an additional 3 % positive performance tolerance, increase your yield still further, even in small areas.

3 High-quality materials

Premium quality through the use of high-quality materials. The waterproof, soldered and sealed junction box, for example, is particularly secure, and with its passively cooled 3-bypass diodes, it ensures the highest yields, even in unfavourable ambient conditions.

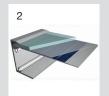
2 | Very high loading capacity

The high-quality design withstands loads of up to 6,000 Pascal or the impact of golf ball-sized hailstones falling at a speed of 120 km/h with ease.

4 | Conergy premium quality

The entire module development, production, quality assurance and module production is TÜV-certified to ISO 9001, 14001 and OHSAS 18001 and meets or exceeds all relevant standards.







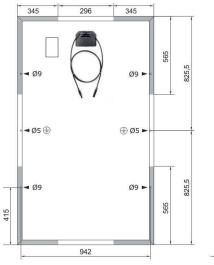


Valid for registered modules of the Conergy PowerPlus series. Otherwise, standard warranty conditions apply.

² Only for PV-CYCLE member countries, more information at www.pvcycle.com

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Module dimensions (L \times W \times H): ¹ Cell dimensions: No. of cells:

Cell type:

NOCT: 2 Maximum permissible load:

Front cover type: Junction box:

Cable: Plug type:

Frame material: Module weight: 4

Maximum permissible system voltage: Reverse current loadability (I_R): Reduction of efficiency from 1,000 W/m² to 200 W/m² in accordance with EN 60904-1:

Certification: Product warranty: 5

Performance guarantee: 5

 $1,651 \times 986 \times 46 \,\text{mm}$ $156\times156\,mm$

60

Monocrystalline cell incorporating

3-busbar technology $48^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 6,000 Pa ³

Micro-structured solar glass, 3.2 mm thickness Huber + Suhner RH3, protection class IP 67,

129 x 94 x 16 mm

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

Huber + Suhner: plug connector with integrated twist lock Anodised aluminium

18.7 kg 1,000 V 20 A

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

IEC/EN 61215 Ed. 2, IEC/EN 61730, SK II, MCS

12 years

>82% of nominal output in year 25

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Conergy PowerPlus	240M	245M	250M	255M
Electrical ratings under standard tes	st conditions: ⁶			
Nominal output (P _{nom})	≥ 240M	≥ 245M	≥ 250M	≥ 255M
Power class range	-0%/+3%	-0%/+3%	-0%/+3%	-0%/+3%
Module efficiency (P _{nom})	14,74%	15,05%	15,36%	15,66%
Voltage at maximum performance (U _{mpp}) ⁷	30,60V	30,90V	31,26V	31,63V
Current at maximum performance (I _{mpp}) ⁷	7,96A	8,01A	8,08A	8,14A
Off-load voltage (U_{oc}) 7	37,57V	37,73V	37,93V	38,12V
Short-circuit current (I _{sc}) ⁷	8,43A	8,48A	8,55A	8,61A
Temperature coefficient (P_{mpp})	-0,42%/°C	-0,42%/°C	-0,42%/°C	-0,42%/°C
Temperature coefficient (U_{oc}), absolute	-0,120V/°C	-0,121V/°C	-0,121V/°C	-0,122V/°C
Temperature coefficient (U_{oc}), in percent	-0,32%/°C	-0,32%/°C	-0,32%/°C	-0,32%/°C
Temperature coefficient (I _{sc}) absolute	4,55mA/°C	4,58mA/°C	4,62mA/°C	4,65mA/°C
Temperature coefficient (I _{sc}) as a percentage	0,054%/°C	0,054%/°C	0,054%/°C	0,054%/°C
Electrical rating at 800 W/m², NOCT a	and AM 1.5			
Power (P _{mpp})	179,66W	182,59W	186,37W	190,01W
Off-load voltage (U_{oc})	34,32V	34,47V	34,66V	34,83V
Short-circuit current (I _{sc})	6,83A	6,87A	6,92A	6,97A
Voltage (U _{mpp})	27,87V	28,14V	28,48V	28,82V
Current (I _{mpp})	6,45A	6,49A	6,54A	6,59A

¹ Dimensional tolerance: +/-1,2 mm

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

Available at:

²Nominal operating temperature of the cell at 800 W/m² irradiation, 20°C ambient temperature,

wind speed of 1 m/s

3 In accordance with IEC 61215 Ed. 2

<sup>New York Standard warranty conditions apply.

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</sup>

⁷ Measuring tolerance STC: +/-3% (Pmpp); +/-10% (Isc, Uoc, Impp, Umpp); measuring tolerance NOCT: +/-5% (Pmpp); +/-10% (Isc, Uoc, Impp, Umpp)