Conergy PowerPlus 215M–240M

Conergy PowerPlus solar modules offer premium quality that pays for itself. 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. We offer a 10-year product warranty for this and comprehensive performance guarantees for a safe and profitable investment.

High yields in practice
- High-performance modules with monocrystalline, triple busbar cell technology
- High level of efficiency, even in poor light conditions
- Up to 2.5 % more module output through positive performance tolerance
- High yield security thanks to comprehensive performance guarantees for 25 years [1]

Premium quality for long service life
- 10-year product warranty [1]
- High-quality and quality-tested materials and TÜV-certified production
- Secure junction box and cavity-free 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 CYCLE [2]

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

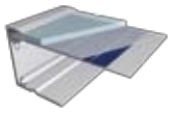
1 | **More output**
High level of performance, with up to 240 Wp rated capacity and an additional 2.5 % positive performance tolerance, increase your yield still further, even in small areas.

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.

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.

4 | **Conergy premium quality**
The entire module development, production, quality assurance and module production is TÜV-certified to ISO 9001 and 14001, and meets or exceeds all relevant standards.

1


2


3


4
TÜVRheinland® CERT ISO 9001 ISO 14001

[1] According to Conergy AG's current warranty conditions
[2] Only for PV-CYCLE member countries, more information at www.pvcycle.com

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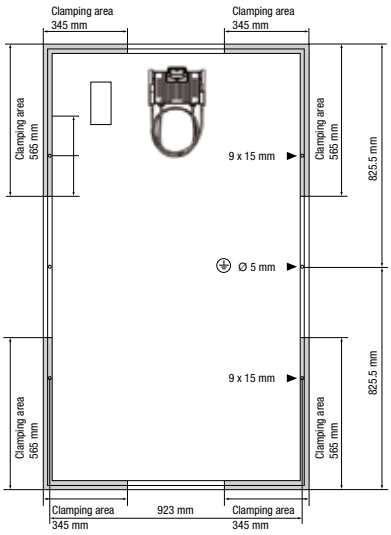

Module dimensions (L × W × H): [1]	1,651 × 986 × 46 mm
Cell dimensions:	156 × 156 mm
No. of cells:	60
Cell type:	Monocrystalline cell incorporating 3-busbar technology
NOCT: [2]	47° C ± 2° C
Maximum permissible load:	6,000 Pa [3]
Front cover type:	Micro-structured solar glass, 3.2 mm diameter
Cable:	2× 1,000 mm length, 4 mm² cross-section
Plug type:	Huber + Suhner: plug connector with integrated twist lock
Frame material:	Anodised aluminium
Module weight: [4]	19.6 kg
Maximum permissible system voltage:	1,000 V
Reverse current loadability (I_R):	20 A
Reduction of efficiency from 1,000 W/m² to 200 W/m² in accordance with EN 60904-1:	At 200 W/m², 96 % of STC efficiency is achieved
Certification:	IEC/EN 61215 Ed. 2, IEC/EN 61730, SK II, MCS
Product warranty: [5]	10 years
Performance guarantee 1: [5]	12 years/92 %
Performance guarantee 2: [5]	25 years/80 %

Conergy PowerPlus	215M	220M	225M	230M	235M	240M
Electrical ratings under standard test conditions: [6]						
Nominal output (P_{nom})	215 W	220 W	225 W	230 W	235 W	240 W
Performance tolerance	–0/+2.5 %	–0/+2.5 %	–0/+2.5 %	–0/+2.5 %	–0/+2.5 %	–0/+2.5 %
Module efficiency (P_{nom})	13.21 %	13.51 %	13.82 %	14.13 %	14.44 %	14.74 %
Voltage at maximum performance (U_{mpp}) [7]	28.55 V	28.82 V	29.05 V	29.30 V	29.49 V	29.70 V
Current at maximum performance (I_{mpp}) [7]	7.63 A	7.74 A	7.85 A	7.95 A	8.06 A	8.15 A
Off-load voltage (U_{oc}) [7]	35.54 V	35.76 V	36.00 V	36.22 V	36.37 V	36.48 V
Short-circuit current (I_{sc}) [7]	8.11 A	8.20 A	8.30 A	8.42 A	8.51 A	8.62 A
Temperature coefficient (P_{mpp})	–0.46 %/° C	–0.46 %/° C	–0.46 %/° C	–0.46 %/° C	–0.46 %/° C	–0.46 %/° C
Temperature coefficient (U_{oc}), absolute	–0.123 V/° C	–0.123 V/° C	–0.123 V/° C	–0.124 V/° C	–0.125 V/° C	–0.125 V/° C
Temperature coefficient (U_{oc}), in percent	–0.34 %/° C	–0.34 %/° C	–0.34 %/° C	–0.34 %/° C	–0.34 %/° C	–0.34 %/° C
Temperature coefficient (I_{sc}) absolute	4.48 mA/° C	4.53 mA/° C	4.57 mA/° C	4.63 mA/° C	4.68 mA/° C	4.73 mA/° C
Temperature coefficient (I_{sc}) as a percentage	0.054 %/° C	0.054 %/° C	0.054 %/° C	0.054 %/° C	0.054 %/° C	0.054 %/° C
Electrical rating at 800 W/m², NOCT and AM 1.5						
Power (P_{mpp})	161.16 W	164.73 W	168.39 W	171.90 W	175.51 W	178.61 W
Off-load voltage (U_{oc})	33.09 V	33.10 V	33.20 V	33.39 V	33.58 V	33.74 V
Short-circuit current (I_{sc})	6.87 A	6.94 A	7.02 A	7.11 A	7.19 A	7.26 A
Voltage (U_{mpp})	25.41 V	25.68 V	25.88 V	26.06 V	26.35 V	26.52 V
Current (I_{mpp})	6.39 A	6.46 A	6.55 A	6.65 A	6.71 A	6.79 A

[1] Dimensional tolerance: +/–1 mm
[2] Nominal 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
[4] Weight tolerance: +/–0.5 kg
[5] According to Conergy AG's current warranty conditions
[6] 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

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

Available at: