



# Conergy PowerPlus 210M–230M

Conergy PowerPlus modules stand for reliably high yields and long service life. They are wholly developed and manufactured in our factory in Frankfurt (Oder). The fully automated manufacturing process ensures that the quality of the modules remains consistently high. Thanks to the positive performance tolerance of up to 2.5% of the nominal power, more electricity is produced throughout the operational life of the system. This benefit is reinforced on our particularly high-performance modules thanks to the positive performance tolerance. In addition, comprehensive product and efficiency warranties guarantee a secure investment.



## Benefits for the system operator:

- | Reliably high yields thanks to high-performance modules
- | Up to 2.5% more module power due to positive performance tolerance
- | High yield security due to improved warranted power of 92% of the nominal power for 12 years and 80% for 25 years
- | Long service life thanks to high-quality craftsmanship and quality components
- | Secure investment decision thanks to 5-year product warranty.<sup>1</sup> Extendable to 10 years on request.<sup>2</sup>
- | Tested and certified in accordance with IEC/EN 61215 Ed. 2 and IEC/EN 61730

## Benefits for the installer:

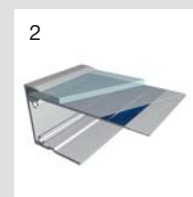
- | Flexible deployment in areas of extreme weather conditions
- | Secure installation thanks to reverse polarity protected plugs with twist lock
- | Modules delivered in perfect condition thanks to secure transportation packaging and robust module frames
- | Reliable operation thanks to high-quality components
- | Customer-friendly after sales service

### 1 | Cell

High performer:  
The highly-efficient 3 busbar cells indicate an optimised cell design and innovative technology.

### 2 | Frame and glass

All-weather professional:  
Whether wind pressure, snow loads or temperature fluctuations – the 4 mm thick solar glass and warp resistant frame can withstand the most extreme of conditions.



### 3 | Junction box

Continuous operation:  
The waterproof junction box with 3 passively cooled bypass diodes guarantees maximum yields even in unfavourable environmental conditions.

### 4 | Inverter

Easily combinable:  
Conergy PowerPlus modules are unbeatable in conjunction with Conergy inverters.

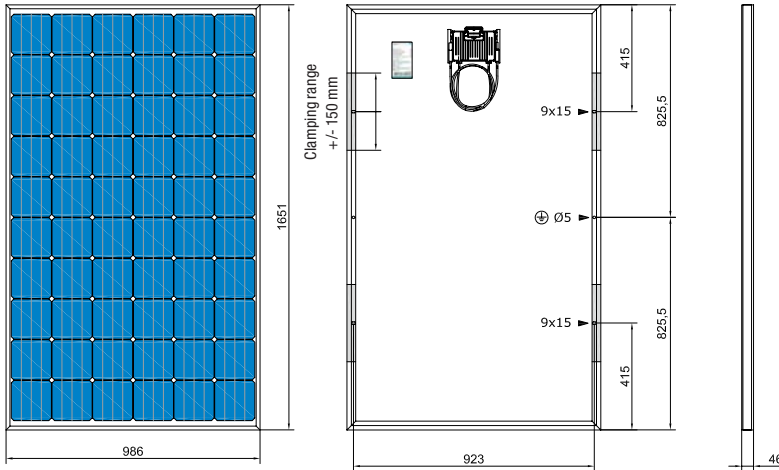


<sup>1</sup> According to the current warranty conditions of Conergy AG

<sup>2</sup> The warranty extension is an after sales product of the respective sales organisation in your country.



# Conergy PowerPlus 210M–230M



<b>Module dimensions</b> (L x W x H):	1,651 × 986 × 46 mm
<b>Cell dimensions:</b>	156 x 156 mm
<b>Number of cells:</b>	60
<b>Type of cells:</b>	monocrystalline
<b>NOCT:<sup>1</sup></b>	43.4 °C
<b>Maximum permissible load:</b>	5,400 Pa <sup>4</sup>
<b>Glass thickness:</b>	4 mm
<b>Cable:</b>	2 x 1,000 mm length, 4 mm <sup>2</sup> cross section
<b>Plug type:</b>	Huber + Suhner: Plug connector with integrated twist lock
<b>Module weight:</b>	22 kg
<b>Certification:</b>	in accordance with IEC/EN 61215 Ed. 2, IEC/EN 61730
<b>Product warranty:<sup>2</sup></b>	5 years, can be extended to 10 years on request

All figures are given in mm

	Conergy PowerPlus 210M	Conergy PowerPlus 215M	Conergy PowerPlus 220M	Conergy PowerPlus 225M	Conergy PowerPlus 230M
<b>Nominal power at STC<sup>3</sup></b>	210 Wp	215 Wp	220 Wp	225 Wp	230 Wp
<b>Power tolerance</b>	-0/+2.5%	-0/+2.5%	-0/+2.5%	-0/+2.5%	-0/+2.5%
<b>Efficiency of the module</b>	12.90%	13.21	13.51%	13.82%	14.13%
<b>Rated voltage (U<sub>mpp</sub>)</b>	28.49 V	28.93 V	29.37 V	29.79 V	30.14 V
<b>Rated current (I<sub>mpp</sub>)</b>	7.44 A	7.50 A	7.56 A	7.62 A	7.68 A
<b>Open-circuit voltage (U<sub>oc</sub>)</b>	34.44 V	35.08 V	35.73 V	36.33 V	37.03 V
<b>Short-circuit current (I<sub>sc</sub>)</b>	8.14 A	8.16 A	8.18 A	8.20 A	8.22 A
<b>Temperature coefficient (P<sub>mp</sub>) procentual</b>	-0.45 %/°C	-0.45 %/°C	-0.45 %/°C	-0.45 %/°C	-0.45 %/°C
<b>Temperature coefficient (U<sub>oc</sub>) absolute</b>	-0.121 V/°C	-0.122 V/°C	-0.123 V/°C	-0.123 V/°C	-0.123 V/°C
<b>Temperature coefficient (U<sub>oc</sub>) procentual</b>	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C
<b>Temperature coefficient (I<sub>sc</sub>) absolute</b>	+4 mA/°C	+4 mA/°C	+4 mA/°C	+4 mA/°C	+4 mA/°C
<b>Temperature coefficient (I<sub>sc</sub>) procentual</b>	+0.05 %/°C	+0.05 %/°C	+0.05 %/°C	+0.05 %/°C	+0.05 %/°C
<b>Warranted power 1<sup>2</sup></b>	12/92 Jahre/%	12/92 Jahre/%	12/92 Jahre/%	12/92 Jahre/%	12/92 Jahre/%
<b>Warranted power 2<sup>2</sup></b>	25/80 Jahre/%	25/80 Jahre/%	25/80 Jahre/%	25/80 Jahre/%	25/80 Jahre/%

<sup>1</sup> Nominal operating temperature of the cell at 800 W/m<sup>2</sup> irradiation, 20 °C ambient temperature, wind speed of 1 m/s  
<sup>2</sup> According to the current warranty conditions of Conergy AG. The warranty extension is an after sales product of the respective sales organisation in your country.  
<sup>3</sup> Standard Test Conditions defined as follows: 1,000 W/m<sup>2</sup> radiant power at a spectral density of AM 1.5 and a cell temperature of 25 °C  
<sup>4</sup> According to IEC 61215 Ed. 2

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