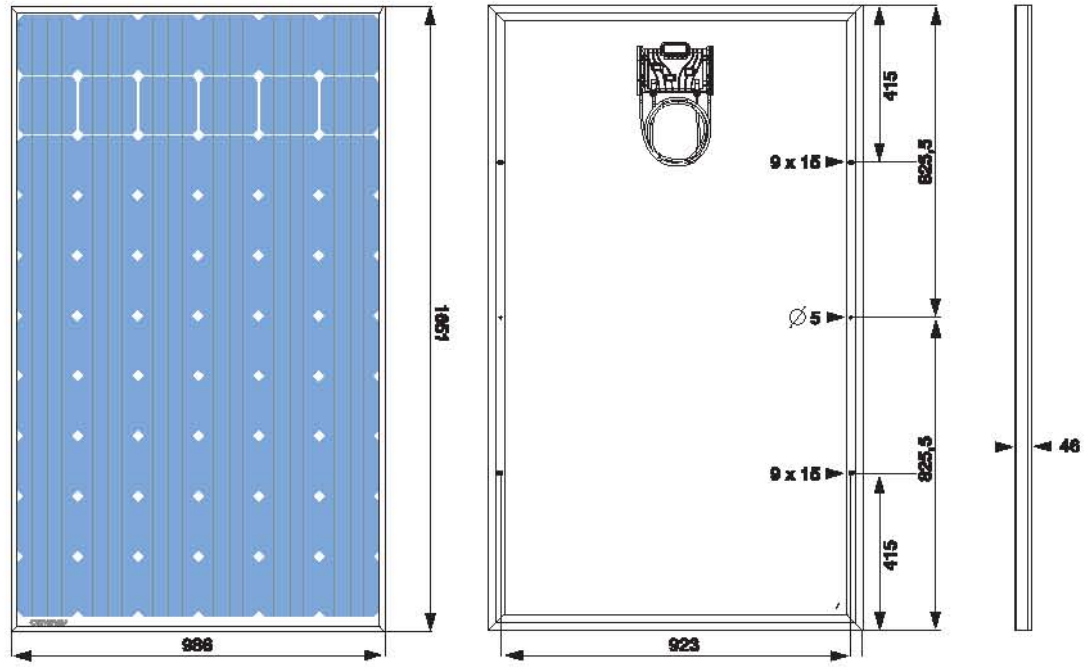
Conergy PowerPlus 190M–240M

Innovative and long-lasting power "Made in Germany": State of the art solar modules from the world's most modern solar plant.

Conergy PowerPlus solar modules are completely developed and produced in Germany and stringently tested in accordance with the new IEC 61730 safety standard. The state-of-the-art fully automatic production process in operation at our factory in Frankfurt/Oder ensures that our modules meet the very highest quality standards. An exceptionally low power tolerance of ±3 % means that customers actually get the module power output they expect. However, it isn't only the power which fits: with their 4 mm thick solar glass and their sturdy frame, the highly stable modules can withstand loads of up to 5,400 Pascal. This means that Conergy PowerPlus solar modules are also suitable for use in extreme ambient conditions.

Conergy PowerPlus – the perfect combination of maximum safety and stability, high performance and top quality.



All dimensions in mm

Conergy PowerPlus 190M–240M

	Conergy PowerPlus 190M	Conergy PowerPlus 200M	Conergy PowerPlus 210M	Conergy PowerPlus 220M	Conergy PowerPlus 230M	Conergy PowerPlus 240M
Max. output (P_{MAX}) as per STC[1]	190 Wp	200 Wp	210 Wp	220 Wp	230 Wp	240 Wp
Performance tolerance	±3 %	±3 %	±3 %	±3 %	±3 %	±3 %
Module efficiency	11.67 %	12.29 %	12.9 %	13.51 %	14.13 %	14.74 %
MPP voltage (V_{MPP})	25.5 V	26.5 V	27.45 V	28.38 V	29.29 V	30.18 V
MPP current (I_{MPP})	7.45 A	7.55 A	7.65 A	7.75 A	7.85 A	7.95 A
Open-circuit voltage (V_{OC})	36.0 V	36.12 V	36.24 V	36.36 V	36.48 V	36.6 V
Short-circuit current (I_{SC})	7.94 A	8.0 A	8.04 A	8.1 A	8.15 A	8.2 A
Temperature coefficient (P_{MPP})	−0.48 %/°C	−0.48 %/°C	−0.48 %/°C	−0.48 %/°C	−0.48 %/°C	−0.48 %/°C
Temperature coefficient (V_{OC})	−0.137 V/°C	−0.137 V/°C	−0.138 V/°C	−0.138 V/°C	−0.139 V/°C	−0.139 V/°C
Temperature coefficient (V_{OC})	−0.38 %/°C	−0.38 %/°C	−0.38 %/°C	−0.38 %/°C	−0.38 %/°C	−0.38 %/°C
Temperature coefficient (I_{SC})	1.1 mA/°C	1.1 mA/°C	1.1 mA/°C	1.1 mA/°C	1.1 mA/°C	1.1 mA/°C
Temperature coefficient (I_{SC})	0.014 %/°C	0.014 %/°C	0.014 %/°C	0.014 %/°C	0.013 %/°C	0.013 %/°C
Maximum system voltage	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V
Cells monocristalline	60	60	60	60	60	60
NOCT[2]	45° C	45° C	45° C	45° C	45° C	45° C
Cell dimensions	156 × 156 mm	156 × 156 mm	156 × 156 mm	156 × 156 mm	156 × 156 mm	156 × 156 mm
Thickness of glass	4 mm	4 mm	4 mm	4 mm	4 mm	4 mm
Length of cables	2 × 1,000 mm	2 × 1,000 mm	2 × 1,000 mm	2 × 1,000 mm	2 × 1,000 mm	2 × 1,000 mm
DC plugs	Huber+Suhner	Huber+Suhner	Huber+Suhner	Huber+Suhner	Huber+Suhner	Huber+Suhner
Module dimensions (L × W × H)	1,651 × 986 × 46 mm					
Weight	22 kg	22 kg	22 kg	22 kg	22 kg	22 kg
Certification	IEC 61215 Ed. 2. IEC 61730					
Product warranty[3]	5 years	5 years	5 years	5 years	5 years	5 years
Output warranty of P_{MIN}[3]	12/90 years/%	12/90 years/%	12/90 years/%	12/90 years/%	12/90 years/%	12/90 years/%
Output warranty of P_{MIN}[2]	25/80 years/%	25/80 years/%	25/80 years/%	25/80 years/%	25/80 years/%	25/80 years/%

1 Standard Test Conditions, which are defined as follows: radiation output of 1,000 W/m² at a spectral density of AM 1.5 (ASTM E892). Cell temperature of 25 °C.
2 Normal Operating Cell Temperature: irradiance of 0.8kW/m², 20°C ambient temperature, windspeed of 1 m/s
3 According to current warranty conditions.