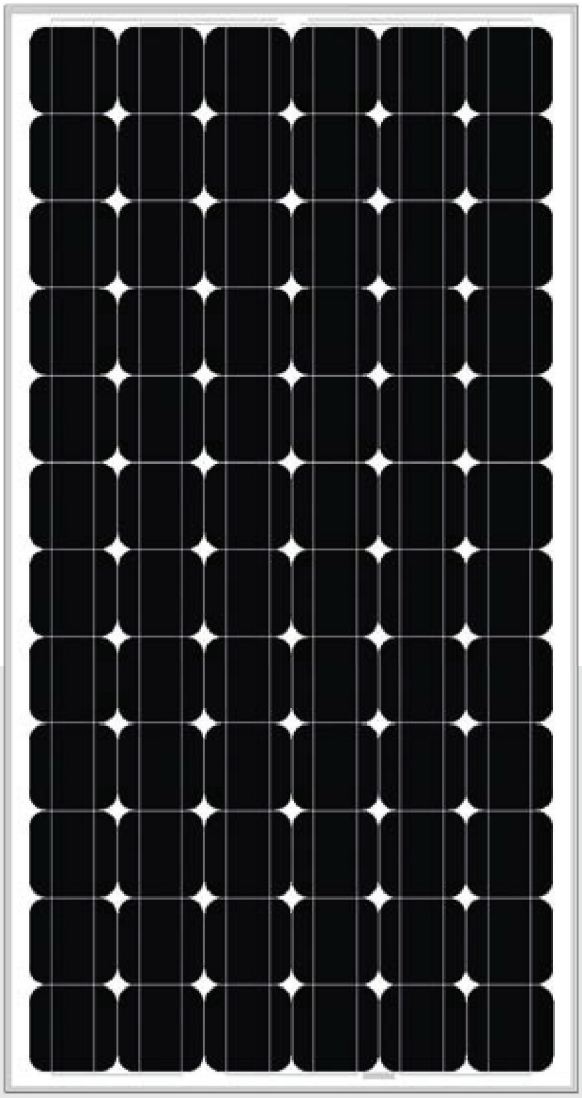
Conergy P 170–190M

The Conergy P 170–190M solar modules offer a multitude of possible uses at an attractive price/performance ratio. They are equipped with 72 efficient monocrystalline cells and have proven their worth in practical applications over the years. They are characterised by high yield and a long service life. The production process is certified according to the ISO 9001 international quality standard and also meets the high quality standards of Conergy. Thanks to the high-quality manufacturing and the small module width, the Conergy P 170–190M can be used for variety of applications.

Solar modules in the Conergy P-series are also available with polycrystalline cells in other power classes and different module dimensions.



Benefits for the system operator

- Attractive price/performance ratio
- Certification in accordance with IEC/EN 61215 Ed. 2 and IEC/EN 61730
- Low performance tolerance of +/– 3 %
- Secure investment decision thanks to a 5-year product warranty

Benefits for the installer

- Simple installation thanks to functional connection technology
- Option to combine with Conergy inverters and mounting systems

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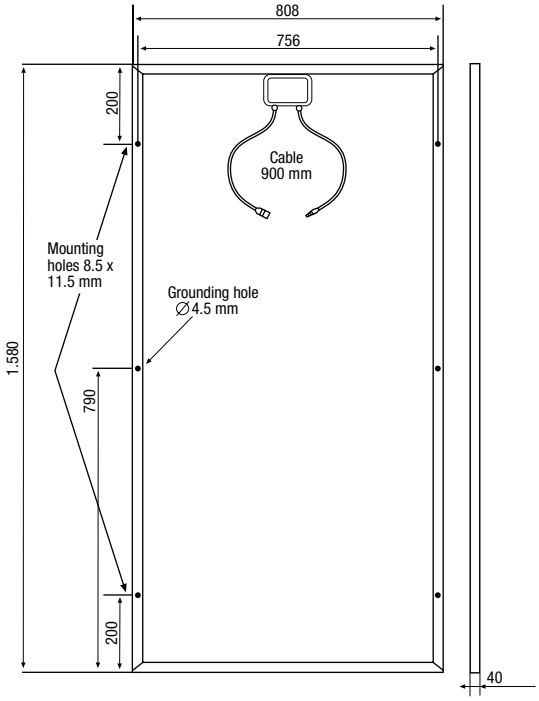

All dimensions in mm

Module dimensions (L × W × H):	1,580 × 808 × 40 mm
Cell dimensions:	125 × 125 mm
Number of cells:	72
Cells:	monocrystalline
NOCT:[1]	45° C
Weight:	14 kg
Certification:	in accordance with IEC/EN 61215 Ed. 2 and IEC/EN 61730
Product warranty:	5 years
Warranted power:	90 % of the nominal power for 12 years 80 % of the nominal power for 25 years
Maximum system voltage:	1,000 V

	Conergy P 170M	Conergy P 175M	Conergy P 180M	Conergy P 185M	Conergy P 190M
Electrical values					
Nominal output (P_{NOM}) according to STC[2]	170 W	175 W	180 W	185 W	190 W
Performance tolerance	±3 %	±3 %	±3 %	±3 %	±3 %
Module efficiency factor	13.3 %	13.7 %	14.1 %	14.5 %	14.88 %
MPP voltage (V_{MPP})	35.9 V	36 V	36 V	36.1 V	35.8 V
MPP current (I_{MPP})	4.74 A	4.86 A	5 A	5.12 A	5.33 A
Off-load voltage (V_{OC})	44.5 V	44.8 V	45 V	45.3 V	44.8 V
Short-circuit current (I_{SC})	5.12 A	5.17 A	5.2 A	5.23 A	5.78 A
Temperature coefficient (P_{MPP})	–0.44 %/° C	–0.44 %/° C	–0.44 %/° C	–0.44 %/° C	–0.44 %/° C
Temperature coefficient (V_{OC})	–0.147 V/° C	–0.148 V/° C	–0.149 V/° C	–0.149 V/° C	–0.148 V/° C
Temperature coefficient (V_{OC})	–0.33 %/° C	–0.33 %/° C	–0.33 %/° C	–0.33 %/° C	–0.33 %/° C
Temperature coefficient (I_{SC})	1.5 mA/° C	1.6 mA/° C	1.6 mA/° C	1.6 mA/° C	1.7 mA/° C
Temperature coefficient (I_{SC})	0.03 %/° C	0.03 %/° C	0.03 %/° C	0.03 %/° C	0.03 %/° C
Junction box specifications					
Socket dimensions (L × W × H)	143 × 140 × 29 mm				
Protection type	IP 65				

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

[2] Standard Test Conditions defined as follows: 1,000 W/m² radiant power at a spectral density of AM 1.5 (ASTM E892), cell temperature of 25° C.