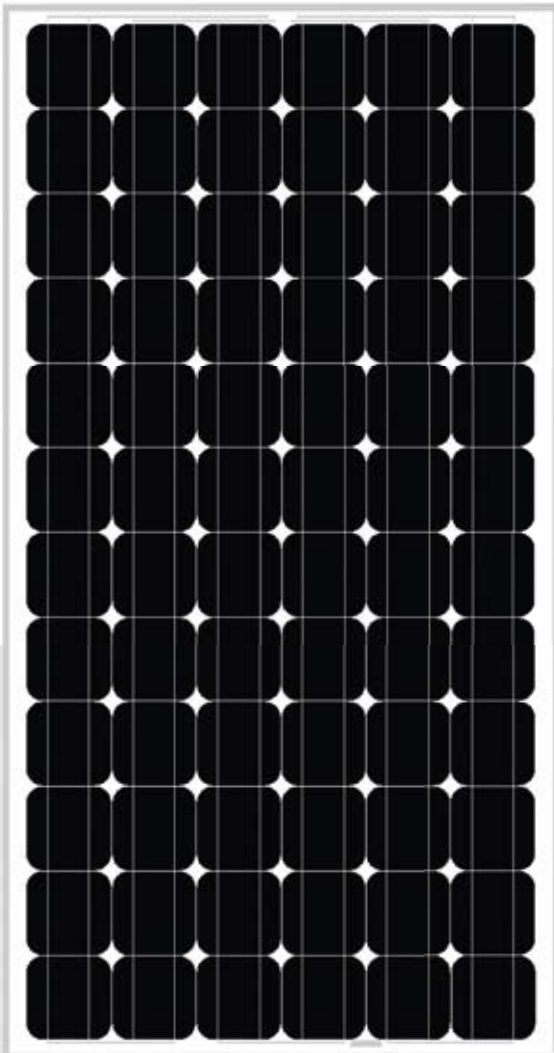




# Conergy P 175M–190M

The Conergy P 175M–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 yields 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 175M–190M can be used for a 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  $\pm 3\%$
- | Secure investment decision thanks to a 5-year product warranty

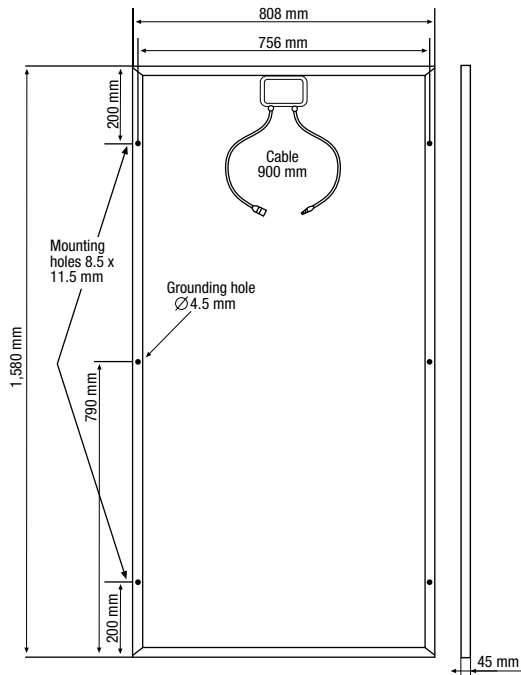
#### Benefits for the installer

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



CONERGY

# Conergy P 175M–190M



Module dimensions (L × W × H): <sup>1</sup>	1,580 × 808 × 45 mm
Cell dimensions:	125 × 125 mm
Number of cells:	72
Cell type:	monocrystalline
NOCT: <sup>2</sup>	45 ± 3 °C
Maximum permissible load:	5,400 Pa <sup>3</sup>
Front cover type:	patterned solar glass
Cable:	Nantong Wirosun PV1-F
Plug type:	Amphenol H4 (MC4-compatible)
Module weight: <sup>4</sup>	14 kg
Certification:	in accordance with IEC/EN 61215 Ed. 2 and IEC/EN 61730, ISO 9001:2008, ISO 14001:2004
Product warranty: <sup>5</sup>	5 years
Performance guarantee 1: <sup>5</sup>	12 years, 90 % of nominal output
Performance guarantee 2: <sup>5</sup>	25 years, 80 % of nominal output
Maximum permissible system voltage:	1,000 V
Reverse current loadability (IR):	13 A
Frame material:	anodised aluminium

Conergy P	175M	180M	185M	190M
<b>Electrical ratings under standard test conditions <sup>6</sup></b>				
Nominal output (P <sub>nom</sub> )	175 W	180 W	185 W	190 W
Performance tolerance	±3 %	±3 %	±3 %	±3 %
Module efficiency (P <sub>nom</sub> )	13.71 %	14.10 %	14.49 %	14.88 %
MPP voltage (V <sub>mpp</sub> ) <sup>7</sup>	35.2 V	35.4 V	35.6 V	35.8 V
MPP current (I <sub>mpp</sub> ) <sup>7</sup>	4.98 A	5.11 A	5.21 A	5.33 A
Off-load voltage (V <sub>oc</sub> ) <sup>7</sup>	44.0 V	44.3 V	44.6 V	44.8 V
Short-circuit current (I <sub>sc</sub> ) <sup>7</sup>	5.48 A	5.59 A	5.68 A	5.78 A
Temperature coefficient (P <sub>mpp</sub> )	-0.44 %/°C	-0.44 %/°C	-0.44 %/°C	-0.44 %/°C
Temperature coefficient (V <sub>oc</sub> ), absolute	-0.145 V/°C	-0.146 V/°C	-0.147 V/°C	-0.148 V/°C
Temperature coefficient (V <sub>oc</sub> ), in per cent	-0.33 %/°C	-0.33 %/°C	-0.33 %/°C	-0.33 %/°C
Temperature coefficient (I <sub>sc</sub> ), absolute	1.6 mA/°C	1.7 mA/°C	1.7 mA/°C	1.7 mA/°C
Temperature coefficient (I <sub>sc</sub> ), in per cent	0.03 %/°C	0.03 %/°C	0.03 %/°C	0.03 %/°C
<b>Electrical rating at 800 W/m<sup>2</sup>, NOCT and AM 1.5</b>				
Power (P <sub>mpp</sub> )	128 Wp	131 Wp	134 Wp	137 Wp
Off-load voltage (V <sub>oc</sub> )	40.5 V	40.8 V	41.0 V	41.2 V
Short-circuit current (I <sub>sc</sub> )	4.44 A	4.53 A	4.60 A	4.68 A
Voltage (V <sub>mpp</sub> )	31.7 V	31.9 V	32.0 V	32.2 V
Current (I <sub>mpp</sub> )	3.98 A	4.09 A	4.17 A	4.26 A

<sup>1</sup> Dimensional tolerance: +/- 1 mm.  
<sup>2</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>3</sup> In accordance with IEC 61215 Ed. 2.  
<sup>4</sup> Weight tolerance: +/- 0.5 kg.  
<sup>5</sup> According to Conergy AG's current warranty conditions.  
<sup>6</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>7</sup> Typical production values.

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

Available from: