

# Conergy PH 175M-190M

The Conergy PH 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 PH 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.



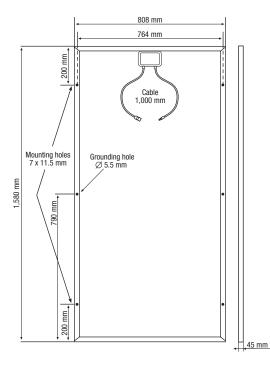
### Benefits for the system operator

- Attractive price/performance ratio
- Certification in accordance with IEC/EN 61215 Ed. 2 and IEC/EN 61730
- Low performance tolerance of +/- 2.5 %
- Secure investment decision thanks to a 10-year product warranty

### Benefits for the installer

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

## Conergy PH 175M-190M



Module dimensions (L  $\times$  W  $\times$  H): <sup>1</sup>  $1,\!580\!\times\!808\!\times\!45\,\text{mm}$ Cell dimensions:  $125 \times 125 \, mm$ 

Number of cells: 72

Cell type: monocrystalline NOCT: 2 47±2°C 5,400 Pa <sup>3</sup> Maximum permissible load: Front cover type:

patterned solar glass Xinhongye PV1-F Cable:

Plug type: PV-CY01L (MC4-compatible)

Module weight: 4

Certification: in accordance with IEC/EN 61215 Ed. 2

and IEC/EN 61730, ISO 9001:2008,

ISO 14001:2004

Product warranty: 5 10 years

Performance guarantee 1: 5 10 years, 90 % of nominal output Performance guarantee 2: 5 25 years, 80% of nominal output

Maximum permissible

system voltage: 1,000 V Reverse current loadability (IR): 14 A

anodised aluminium Frame material:

Conergy PH	175M	180M	185M	190M
Electrical ratings under standard test conditions <sup>6</sup>				
Nominal output (P <sub>nom</sub> )	175 W	180 W	185 W	190 W
Performance tolerance	±2.5 %	±2.5 %	±2.5 %	±2.5%
Module efficiency (P <sub>nom</sub> )	13.71 %	14.10 %	14.49%	14.88%
MPP voltage (V <sub>mpp</sub> ) <sup>7</sup>	35.65 V	36.02V	36.38V	36.74V
MPP current (I <sub>mpp</sub> ) <sup>7</sup>	4.92 A	5.00 A	5.09A	5.17 A
Off-load voltage ( $V_{\rm oc}$ ) $^7$	44.63 V	44.88 V	45.12 V	45.37 V
Short-circuit current (I <sub>sc</sub> ) <sup>7</sup>	5.23 A	5.31 A	5.39 A	5.47 A
Temperature coefficient (P <sub>mpp</sub> )	−0.48 %/° C	−0.48 %/° C	−0.48 %/° C	−0.48 %/° C
Temperature coefficient ( $V_{\text{oc}}$ ), absolute	−0.158 V/° C	−0.159 V/° C	−0.160 V/° C	−0.161 V/° C
Temperature coefficient ( $V_{\text{oc}}$ ), in per cent	−0.36 %/° C	−0.36 %/° C	−0.36 %/° C	−0.36 %/° C
Temperature coefficient ( $I_{sc}$ ), absolute	3.3 mA/° C	3.3 mA/° C	3.4 mA/° C	3.4 mA/° C
Temperature coefficient ( $I_{sc}$ ), in per cent	0.06 %/° C	0.06 %/° C	0.06 %/° C	0.06 %/° C
Electrical rating at 800 W/m², NOCT and AM 1.5				
Power (P <sub>mpp</sub> )	116 Wp	119 Wp	123 Wp	126 Wp
Off-load voltage (V <sub>oc</sub> )	40.02 V	40.24 V	40.46 V	40.68 V
Short-circuit current (I <sub>sc</sub> )	3.97 A	4.03 A	4.09 A	4.15 A
Voltage (V <sub>mpp</sub> )	31.73 V	32.36 V	32.43 V	32.79 V
Current (I <sub>mpp</sub> )	3.67 A	3.73 A	3.79A	3.85 A

<sup>1</sup> Dimensional tolerance: +/-1 mm.

Available from:

<sup>&</sup>lt;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.

3 In accordance with IEC 61215 Ed. 2.

Standard Test Conditions defined as follows: 1,000W/m² radiant power at a spectral density of AM 1.5 and a cell temperature of 25° C.
 Typical production values.

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