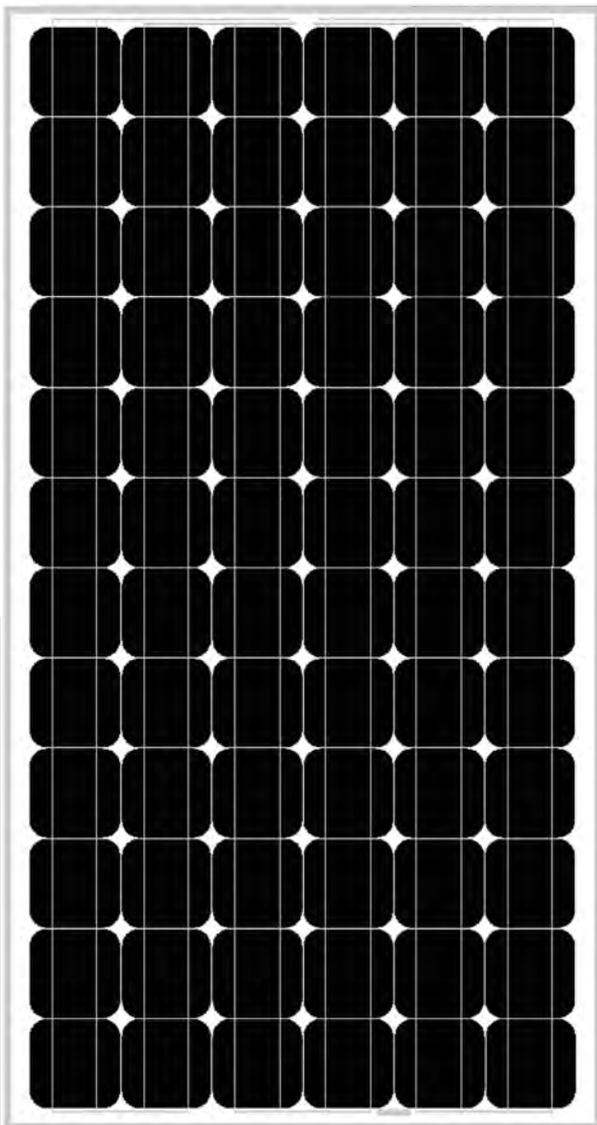


Conergy P 190M–195M 35mm

The Conergy P 180M–195M 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 180M–195M 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.



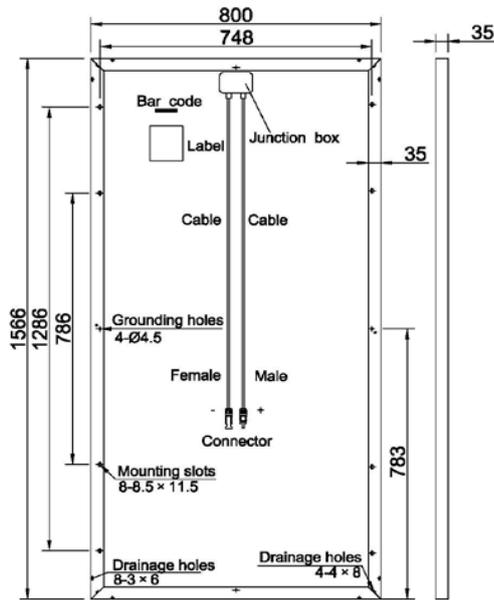
Benefits for the system operator

- | 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 P 190M–195M 35mm



BACK VIEW

Module dimensions (L × W × H) ¹ :	1,566 × 800 × 35 mm
Cell dimensions:	125 × 125 mm
Number of cells:	72
Cell type:	monocrystalline
NOCT: ²	45±3° C
Maximum permissible load:	5,400 Pa ³
Front cover type:	patterned solar glass
Cable:	Nantong Wirosun PV1-F
Plug type:	Linyang
Module weight: ⁴	13 kg
Certification:	in accordance with IEC/EN 61215 Ed. 2 and IEC/EN 61730, ISO 9001:2008, ISO 14001:2004
Product warranty: ⁵	5 years
Performance guarantee 1: ⁵	12 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):	13.5 A
Frame material:	anodised aluminium alloy

Conergy P	180M	185M	190M	195M
Electrical ratings under STC⁶				
Nominal output (P _{nom})	180 W	185 W	190 W	195 W
Performance tolerance	±3 %	±3 %	±3 %	±3 %
Module efficiency (P _{nom})	14.10 %	14.49 %	14.88 %	15.30 %
MPP voltage (V _{mpp}) ⁷	35.4 V	35.6 V	35.8 V	36.0 V
MPP current (I _{mpp}) ⁷	5.11 A	5.21 A	5.33 A	5.42 A
Off-load voltage (V _{oc}) ⁷	44.3 V	44.6 V	44.8 V	45.0 V
Short-circuit current (I _{sc}) ⁷	5.59 A	5.68 A	5.78 A	5.85 A
Temperature coefficient (P _{mpp})	-0.44 %/°C	-0.44 %/°C	-0.44 %/°C	-0.44 %/°C
Temperature coefficient (V _{oc}), absolute	-0.146 V/°C	-0.147 V/°C	-0.148 V/°C	-0.148 V/°C
Temperature coefficient (V _{oc}), in per cent	-0.33 %/°C	-0.33 %/°C	-0.33 %/°C	-0.33 %/°C
Temperature coefficient (I _{sc}), absolute	1.7 mA/°C	1.7 mA/°C	1.7 mA/°C	1.7 mA/°C
Temperature coefficient (I _{sc}), in per cent	0.03 %/°C	0.03 %/°C	0.03 %/°C	0.03 %/°C
Electrical rating at 800 W/m², NOCT and AM 1.5				
Power (P _{mpp})	131 Wp	134 Wp	137 Wp	140 Wp
Off-load voltage (V _{oc})	40.8 V	41.0 V	41.2 V	41.4 V
Short-circuit current (I _{sc})	4.53 A	4.60 A	4.68 A	4.74 A
Voltage (V _{mpp})	31.9 V	32.0 V	32.2 V	32.4 V
Current (I _{mpp})	4.09 A	4.17 A	4.26 A	4.34 A

¹ Dimensional tolerance: +/-1 mm.

² Nominal operating temperature of the cell at 800 W/m² irradiation, 20° C ambient temperature, wind speed of 1 m/s.

³ In accordance with IEC 61215 Ed. 2.

⁴ Weight tolerance: +/- 0.5 kg.

⁵ According to Conergy AG's current warranty conditions.

⁶ Standard Test Conditions defined as follows: 1,000 W/m² radiant power at a spectral density of AM 1.5 and a cell temperature of 25° C.

⁷ Typical production values.

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

Available from: