## CONERGY

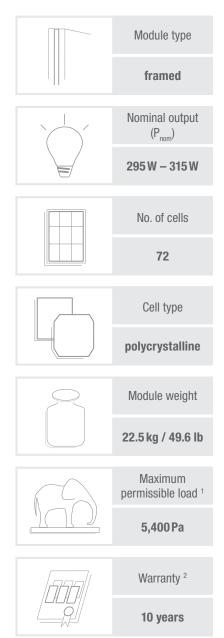
### Conergy PE 295P - 315P



The Conergy P-series solar modules offer a high level of module output at an attractive price/performance ratio. They are equipped with efficient cells and have proven their worth in practical applications over the years. They are characterised by high yields and a long service life. Their production is certified in accordance with the ISO 9001, ISO 14001 and OHSAS 18001 international quality standards and meets the high quality standards of Conergy. Solar modules in the Conergy P-series are also available with monocrystalline and polycrystalline cells in other powerclasses and different module dimensions.

#### **Benefits:**

- High salt corrosion and humidity resistance complies with IEC 61701: Salt Mist Corrosion Testing
- Outstanding performance in low-light irradiance environments anti-reflective and self-cleaning surface reduces power loss from dirt and dust
- 100% EL double-inspection ensures modules are defects-free













<sup>&</sup>lt;sup>1</sup> In accordance with IEC 61215 Ed.2 and according to Conergy AG's current installation manual.

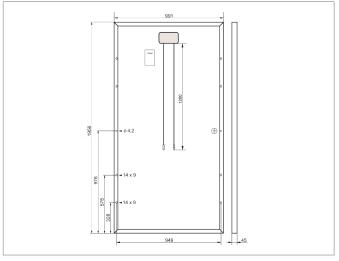
<sup>&</sup>lt;sup>2</sup> According to Conergy AG's current warranty conditions.

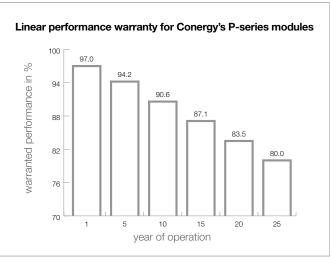
# CONERGY

### Conergy PE 295P — 315P

### **Mechanical specification**

Module dimensions $(L \times W \times H)$	1,956×991×45 mm / 77.01 x 39.01 x 1.77 in			
Cell dimensions	156 × 156 mm / 6.14 x 6.14 in			
No. of cells	72			
Cell type	Polycrystalline cell; 3-busbar technology			
NOCT <sup>3</sup>	47° C ± 2° C			
Maximum permissible load <sup>4</sup>	5400Pa / 113psf – Front side (long side mount) 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Man 2400Pa / 50psf – Back side – (negative load/wind)			
Front cover type	Tempered solar glass with 4 mm thickness			
Junction box	Zhonghuan Sunter PV-ZH011-1, Protection class IP67; 103 x 69 x 15mm			
Cable	PV Wire PV1-F; 12AWG PV Wire (UL4703); ×1,200 mm length; 4 mm² cross-section			
Plug type	Amphenol Helios H4			
Frame material	Anodised aluminium			
Module weight	22.50 kg / 49.60 lb			
Certification:	IEC/EN 61215 Ed. 2, IEC/EN 61730, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, MCS, UL1703 (US and Canada)			
Product warranty <sup>5</sup>	10 years			
Power warranty <sup>5</sup>	Linear performance warranty year 1: $\geq$ 97% of nominal power output year 25: $\geq$ 80% of nominal power output			
Maximum permissible system voltage	1000vdc			
Maximum Series Fuse Rating	15A			
Fire Resistance Rating	Class C			
Operating Temperature	-40° to +85° C			





<sup>&</sup>lt;sup>3</sup> Nominal operating temperature of the cell at 800 W/m² irradiation, 20° C ambient temperature, wind speed of 1 m/s

<sup>&</sup>lt;sup>4</sup> In accordance with IEC 61215 Ed.2 and according to Conergy AG's current installation manual.

 $<sup>^{\</sup>mbox{\tiny 5}}$  According to Conergy AG's current warranty conditions.



### Conergy PE 295P — 315P

### Electrical ratings under standard test conditions <sup>6</sup>

Conergy PE	295P	300P	305P	310P	315P
Nominal output (P <sub>nom</sub> )	≥295W	≥300W	≥305W	≥310 W	≥315 W
Power class range	-0 %/+3 %	-0 %/+3 %	-0 %/+3 %	-0 %/+3 %	-0 %/+3 %
Module efficiency (P <sub>nom</sub> )	15.22%	15.48 %	15.73%	15.99%	16.25 %
Voltage at maximum performance (V $_{\rm mpp}$ ) $^{\rm 7}$	36.25 V	36.41 V	36.71 V	37.00 V	37.28 V
Current at maximum performance (I $_{\rm mpp})$ $^{\rm 7}$	8.14A	8.24A	8.31 A	8.38 A	8.45 A
Open Circuit Voltage ( ${\rm V_{oc}}$ ) $^{\rm 7}$	45.00 V	45.20 V	45.35 V	45.45 V	45.60 V
Short-circuit current (I $_{\rm sc})$ $^{\rm 7}$	8.65 A	8.73A	8.79A	8.85 A	8.91 A
Temperature coefficient $(P_{mpp})$	-0.430 %/° C	-0.430 %/°C	-0.430 %/° C	-0.430 %/° C	-0.430 %/° C
Temperature coefficient ( $V_{oc}$ ), absolute	-0.149 V/° C	-0.149 V/° C	-0.150 V/° C	-0.150 V/° C	-0.151 V/° C
Temperature coefficient ( $V_{oc}$ ), in percent	-0.330 %/° C				
Temperature coefficient ( $I_{sc}$ ), absolute	5.02 mA/° C	5.06 mA/° C	5.10 mA/° C	5.13 mA/° C	5.17 mA/° C
Temperature coefficient ( $I_{sc}$ ), in percent	+0.058 %/° C				

### Electrical rating at 800 W/m², NOCT and AM 1.5

Conergy PE	295P	300P	305P	310P	315P
Power (P <sub>mpp</sub> )	214.17 W	217.80 W	221.43 W	225.06 W	228.69W
Open Circuit Voltage ( $V_{oc}$ )	42.14 V	42.31 V	42.47 V	42.58V	42.63 V
Short-circuit current (I <sub>sc</sub> )	6.84A	6.89A	6.93A	6.99A	7.06 A
Voltage $(V_{mpp})$	33.57 V	33.77 V	33.91 V	34.05 V	34.08 V
Current (I <sub>mpp</sub> )	6.38A	6.45 A	6.53A	6.61 A	6.71 A

<sup>&</sup>lt;sup>6</sup> 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

<sup>&</sup>lt;sup>7</sup> Measuring tolerance STC: +/-3%.



ubject to technical modifications and errors without notice.

asheet complies with the specifications of DIN EN 50380.



### **Conergy US Headquarters**

2460 West 26th Avenue Suite 280C Denver, CO 80211 USA info@conergy.us

Toll Free: 888.396.6611 Tel: 720.305.0700

### www.conergy.us

Available at:

### **Conergy Canada Headquarters**

17815 - 111 Ave. Edmonton, AB T5S 2X3 Canada info@conergy.ca Toll Free: 888.489.3701

Tel: 780.489.3700

www.conergy.ca