CONERGY

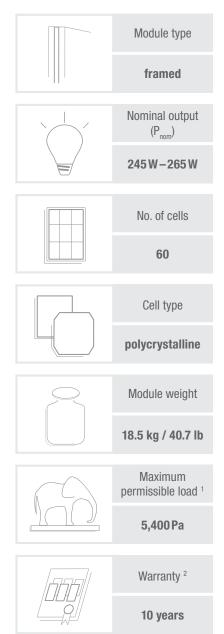
Conergy PE 245P — 265P



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 ISO 9001, ISO 14001 and OHSAS 18001 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 power classes 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













¹ In accordance with IEC 61215 Ed.2 and according to Conergy AG's current installation manual.

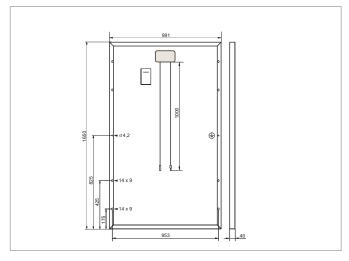
² According to Conergy AG's current warranty conditions.

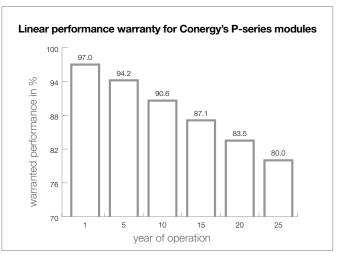
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Conergy PE 245P — 265P

Mechanical specification

Module dimensions (L×W×H) 1.650×991×40mm / 6.00 x 39.01 x 1.57 in Cell dimensions 156×156mm / 6.14 x 6.14 in No. of cells 60 Cell type Polycrystalline cell; 3-busbar technology NOCT³ 47° C ± 2° C Maximum permissible load ⁴ 470° C ± 2° C Front cover type 7 mepered solar glass, 3.2 mm thickness Junction box 2 mepered solar glass, 3.2 mm thickness Plug type Amm² cross-section Prame material Amplenol Helios H4 Module weight 18.50kg / 40.70 lb Certification 18.50kg / 40.70 lb Product warranty ⁵ 10 years Proformance warranty ³ 10 years Maximum permissible system voltage 10 000vdc Reverse current loadability (R) 15.4 Free Resistance Rating 4.00° to +85° C					
Cell type Polycrystalline cell; 3-busbar technology NOCT 3 47° C ± 2° C 5400Pa / 113psf - Front side (short side/corner mount) - Details in Install Manual 2400Pa / 50psf - Back side - (negative load/wind) Front cover type Tempered solar glass, 3.2 mm thickness Junction box Zhonghuan Sunter PV-ZH011-1; Protection Class IP67; 103 × 69 × 15 mm Cable PV Wire PV1-F; 12AWG PV Wire (UL4703); × 1,000 mm length; 4 mm² cross-section Amphenol Helios H4 Frame material Anodised aluminium (black frame available) Module weight 18.50 kg / 40.70 lb Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty s 10 years Performance warranty s Linear performance warranty year 1: ≥ 97% of nominal power output year 25: ≥ 80% of nominal power output year 25: ≥ 80% of nominal power output Maximum permissible system voltage Reverse current loadability (IR) Fire Resistance Rating 60 Cals C Cals C Class C	Module dimensions (L×W×H)	1,650 × 991 × 40 mm / 65.00 x 39.01 x 1.57 in			
Cell type Polycrystalline cell; 3-busbar technology NOCT ³ 47° C ± 2° C \$400Pa / 113psf − Front side (long side mount) 2400Pa / 50psf − Front side (short side/corner mount) − Details in Install Manual 2400Pa / 50psf − Front side (short side/corner mount) − Details in Install Manual 2400Pa / 50psf − Back side − (negative load/wind) Front cover type Tempered solar glass, 3.2 mm thickness Junction box Zhonghuan Sunter PV−ZH011−1; Protection Class IP67; 103 × 69 × 15 mm PV Wire PV1−F; 12AWG PV Wire (UL4703); × 1,000 mm length; 4 mm² cross-section Plug type Amphenol Helios H4 Frame material Anodised aluminium (black frame available) Module weight 18.50kg / 40.70 lb Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty s Performance warranty s Performance warranty s Vear 25: ≥ 80% of nominal power output year 25: ≥ 80% of nominal power output year 25: ≥ 80% of nominal power output Maximum permissible system voltage Reverse current loadability (IR) Fire Resistance Rating Class C	Cell dimensions	156 × 156 mm / 6.14 x 6.14 in			
NOCT 3 47° C ± 2° C 5400Pa / 113psf – Front side (long side mount) 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Back side – (negative load/wind) Front cover type Tempered solar glass, 3.2 mm thickness Junction box Zhonghuan Sunter PV-ZH011-1; Protection Class IP67; 103 × 69 × 15 mm Cable PV Wire PV1-F; 12AWG PV Wire (UL4703); × 1,000 mm length; 4 mm² cross-section Plug type Amphenol Helios H4 Frame material Anodised aluminium (black frame available) Module weight 18.50 kg / 40.70 lb 19.9 arm side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Fack side – (negative load/wind) 2400Pa / 50psf – Fack side – (negative load/wind) 2400Pa / 50psf – Fack side – (negative load/wind) 2400Pa / 50psf – Fack side – (negative load/wind) 2400Pa / 50psf – Fack side – (negative load/wind) 2400Pa / 50psf – Fac	No. of cells	60			
Maximum permissible load ⁴ \$400Pa / 13psf – Front side (long side mount) 2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manual 2400Pa / 50psf – Back side – (negative load/wind) Front cover type Tempered solar glass, 3.2mm thickness Junction box Zhonghuan Sunter PV-ZH011-1; Protection Class IP67; 103 × 69 × 15 mm Cable PV Wire PV1-F; 12AWG PV Wire (UL4703); × 1,000 mm length; 4 mm² cross-section Plug type Amphenol Helios H4 Frame material Anodised aluminium (black frame available) Module weight 18.50 kg / 40.70 lb Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty ⁵ 10 years Linear performance warranty year 1: ≥ 97% of nominal power output year 25: ≥ 80% of nominal power output Maximum permissible system voltage 1000vdc Reverse current loadability (IR) 15A Fire Resistance Rating Class C	Cell type	Polycrystalline cell; 3-busbar technology			
Maximum permissible load ⁴ 2400Pa / 50psf – Front side (shorf side/corner mount) – Details in Install Manual 2400Pa / 50psf – Back side – (negative load/wind) Front cover type Tempered solar glass, 3.2 mm thickness Junction box Zhonghuan Sunter PV-ZH011-1; Protection Class IP67; 103 × 69 × 15 mm Cable PV Wire PV1-F; 12AWG PV Wire (UL4703); × 1,000 mm length; 4 mm² cross-section Plug type Amphenol Helios H4 Frame material Anodised aluminium (black frame available) Module weight 18.50 kg / 40.70 lb Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty s 10 years Performance warranty year 1: 2 97% of nominal power output year 25: ≥ 80% of nominal power output Maximum permissible system voltage 1000vdc Reverse current loadability (IR) 15A Fire Resistance Rating Class C	NOCT ³	47°C ± 2°C			
Junction box Zhonghuan Sunter PV-ZH011-1; Protection Class IP67; 103 × 69 × 15 mm Cable PV Wire PV1-F; 12AWG PV Wire (UL4703); × 1,000 mm length; 4 mm² cross-section Plug type Amphenol Helios H4 Frame material Anodised aluminium (black frame available) Module weight 18.50 kg / 40.70 lb Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty 5 10 years Linear performance warranty year 1: ≥ 97% of nominal power output year 25: ≥ 80% of nominal power output Maximum permissible system voltage 1000vdc Reverse current loadability (IR) 15A Fire Resistance Rating Class C	Maximum permissible load ⁴	2400Pa / 50psf – Front side (short side/corner mount) – Details in Install Manu			
Cable PV Wire PV1-F; 12AWG PV Wire (UL4703); × 1,000 mm length; 4 mm² cross-section Plug type Amphenol Helios H4 Frame material Anodised aluminium (black frame available) Module weight 18.50 kg / 40.70 lb Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty ⁵ 10 years Performance warranty year 1: ≥ 97% of nominal power output year 25: ≥ 80% of nominal power output Maximum permissible system voltage 1000vdc Reverse current loadability (IR) 15A Fire Resistance Rating Class C	Front cover type	Tempered solar glass, 3.2 mm thickness			
Value Ample cross-section Plug type Amphenol Helios H4 Frame material Anodised aluminium (black frame available) Module weight 18.50 kg / 40.70 lb Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty 5 10 years Performance warranty year 1: ≥ 97 % of nominal power output year 25: ≥ 80 % of nominal power output Maximum permissible system voltage 1000vdc Reverse current loadability (IR) 15A Fire Resistance Rating Class C	Junction box	Zhonghuan Sunter PV-ZH011-1; Protection Class IP67; $103 \times 69 \times 15 \text{ mm}$			
Frame material Anodised aluminium (black frame available) 18.50 kg / 40.70 lb 19.00 is considered aluminium (black frame available) 10.00 is considered aluminium (black frame available) 10.00 kg / 40.70 lb 10.00 vdc varianty 10.00 vdc 10.00 vdc	Cable				
Module weight 18.50 kg / 40.70 lb Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty ⁵ 10 years Linear performance warranty year 1: ≥ 97 % of nominal power output year 25: ≥ 80 % of nominal power output Maximum permissible system voltage 1000vdc Reverse current loadability (IR) 15 A Fire Resistance Rating Class C	Plug type	Amphenol Helios H4			
Certification IEC/EN 61215 Ed. 2, IEC/EN 61730, MCS, ISO 9001:2008, ISO 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) Product warranty ⁵ 10 years Linear performance warranty year 1: ≥ 97% of nominal power output year 25: ≥ 80% of nominal power output Maximum permissible system voltage 1000vdc Reverse current loadability (IR) 15 A Fire Resistance Rating Class C	Frame material	Anodised aluminium (black frame available)			
Product warranty 5 10 years Linear performance warranty year 1: ≥ 97 % of nominal power output year 25: ≥ 80 % of nominal power output Maximum permissible system voltage Reverse current loadability (IR) Fire Resistance Rating 14001:2004, OHSAS 18001: 2007, UL1703 (US and Canada) 10 years Linear performance warranty year 1: ≥ 97 % of nominal power output 1000vdc 1000vdc Class C	Module weight	18.50 kg / 40.70 lb			
Performance warranty 5 Linear performance warranty year 1: ≥ 97 % of nominal power output year 25: ≥ 80 % of nominal power output 1000vdc Reverse current loadability (IR) 15 A Fire Resistance Rating Class C	Certification				
Performance warranty 5 year 1: ≥ 97% of nominal power output year 25: ≥ 80% of nominal power output Maximum permissible system voltage 1000vdc Reverse current loadability (IR) 15 A Fire Resistance Rating Class C	Product warranty ⁵	10 years			
Reverse current loadability (IR) 15 A Fire Resistance Rating Class C	Performance warranty ⁵	year 1: ≥ 97 % of nominal power output			
Fire Resistance Rating Class C	Maximum permissible system voltage	1000vdc			
	Reverse current loadability (IR)	15A			
Operating Temperature -40° to +85° C	Fire Resistance Rating	Class C			
	Operating Temperature	-40° to +85° C			





 $^{^3}$ Nominal operating temperature of the cell at $800 \, \text{W/m}^2$ irradiation, $20^\circ \, \text{C}$ ambient temperature, wind speed of 1 m/s

 $^{^{\}rm 4}$ In accordance with IEC 61215 Ed.2 and according to Conergy AG's current installation manual.

⁵ According to Conergy AG's current warranty conditions



Conergy PE 245P — 265P

Electrical ratings under standard test conditions ⁶

Conergy PE	245P	250P	255P	260P	265P
Nominal output (P _{nom})	≥245 W	≥250 W	≥255 W	≥260 W	≥265 W
Power class range	-0 %/+3 %	-0 %/+3 %	-0 %/+3 %	-0 %/+3 %	-0 %/+3 %
Module efficiency (P _{nom})	14.98%	15.29%	15.59%	15.90%	16.21 %
Voltage at maximum performance $(V_{\mbox{\tiny mpp}})$	29.59V	29.94V	30.29 V	30.63 V	30.96V
Current at maximum performance (I_{mpp})	8.28 A	8.35 A	8.42 A	8.49A	8.56 A
Open Circuit Voltage (V_{oc})	37.50 V	37.66 V	37.82 V	37.98 V	38.14V
Short-circuit current (I_{sc})	8.86A	8.92A	8.98A	9.04A	9.10 A
Temperature coefficient (P_{mpp})	-0.430 %/° C				
Temperature coefficient ($V_{\rm oc}$), absolute	-0.124 V/° C	-0.124 V/° C	-0.125 V/° C	-0.125 V/° C	-0.126 V/° C
Temperature coefficient (V_{oc}), in percent	-0.330 %/° C				
Temperature coefficient (I_{so}), absolute	5.14 mA/° C	5.17 mA/° C	5.21 mA/° C	5.24 mA/° C	5.28 mA/° C
Temperature coefficient (I_{so}), in percent	+0.058 %/° C	+0.058 %/° C	+0.058%/°C	+0.058 %/° C	+0.058 %/° C

Electrical rating at 800 W/m², NOCT and AM 1.5 7

Conergy PE	245P	250P	255P	260P	265P
Power (P _{mpp})	177.87 W	181.50 W	185.13 W	188.76 W	192.39 W
Open Circuit Voltage ($V_{\rm oc}$)	34.48 V	34.61 V	34.68 V	34.76 V	34.87 V
Short-circuit current (I _{sc})	7.03 A	7.13 A	7.18 A	7.21 A	7.24 A
Voltage (V _{mpp})	27.20 V	27.42 V	27.71 V	28.05 V	28.42V
Current (I _{mpp})	6.54A	6.62A	6.68A	6.73 A	6.77 A

⁶ 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

⁷ Measuring tolerance STC: +/-3%.