



The Conergy PH 230P-250P solar modules offer a high level of module output at an attractive price/performance ratio. They are equipped with 60 efficient, polycrystalline 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 international quality standard and meets the high quality standards of Conergy. Thanks to the superb quality of manufacture and standardised dimensions, the Conergy PH 230P-250P can be used for all applications.

Solar modules in the Conergy P-series are also available with monocrystalline and polycrystalline cells in other power classes and different module dimensions.

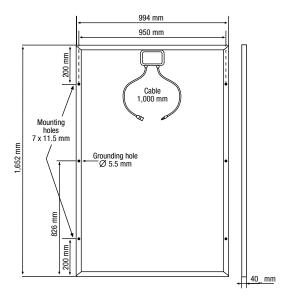


## Features:

- | Attractive price/performance ratio
- | 3 busbar cell design for better efficiency and yield
- | Precision, +3% power tolerance
- | 10-year product warranty
- | PV wire cables for use with transformerless inverters
- Robust frame design allows short side frame mounting
- | Certified to UL 1703 (US and Canada), IEC/EN 61215 Ed.2, IEC/EN 61730

## Conergy PH 230P-250P





Module dimensions				
(L x W x H)	1652 x 994 x 40mm / 65.0 x 39.1 x 1.57 in			
Cell dimensions	156 x 156 mm/6.14 x 6.14 in			
Number of cells	60			
Module weight	19kg/41.8lb			
Maximum load	5400Pa/113psf - standard mount zones 2400Pa/50psf - short side mount zones			
Glass	3.2mm tempered			
Junction box	IP65 Class			
Cable	1000mm/39.4 in, 4mm <sup>2</sup> 12AWG PV wire (UL4703)			
Connector	MC4 Compatible			
Certifications				
Operating certifications	UL1703 (USA and Canada), IEC 61215 Ed.2			
Fire safety classification	Class C			
Warranty				
Material and workmanship warranty	10 years			
Power warranty 1	90%/10 years			
Power warranty 2	80%/25 years			



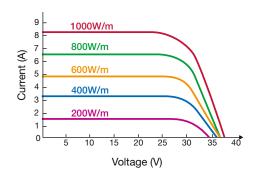




	Conergy PH Series					
	230P	235P	240P	245P	250P	
Rated power (P <sub>max</sub> ) <sup>1</sup>	230W	235W	240W	245W	250W	
Power tolerance	+3%	+3%	+3%	+3%	+3%	
Module efficiency	14.0%	14.3%	14.6%	14.9%	15.2%	
Maximum power voltage ( $V_{\mbox{\tiny mpp}}$ )	27.78V	29.16V	29.54V	29.92V	30.30V	
Maximum power current (I <sub>mpp</sub> )	7.99A	8.06A	8.13A	8.20A	8.27A	
Open circuit voltage (V <sub>oc</sub> )	37.4V	37.6V	37.8V	37.98V	38.19V	
Short circuit current (I <sub>sc</sub> )	8.53A	8.56A	8.59A	8.62A	8.65A	
Nominal Operating Cell Temperature (NOCT)	43±2°C					
Temperature coefficient ( $P_{\text{max}}$ )	−0.47%/°C					
Temperature coefficient ( $V_{oc}$ )	−0.34 %/°C					
Temperature coefficient (I <sub>sc</sub> )	0.05 %/°C					
Maximum system voltage	600V(UL)/1000V (IEC)					
Maximum Series Fuse Rating	15A					

## <sup>1</sup> At Standard Test Conditions (STC): 1000W/m², 25°C, air mass 1.5

## Conergy PH 230P I-V Curves



Available from:

Conergy\_PH\_2230-250P\_TD\_ENG\_2012-10-29