



CONERGY

Photovoltaic modules | Technical Data

Conergy P 210-230PA

High durability in rigorous conditions

The Conergy solar modules P 210–230PA are designed for large electrical power requirements. Its high-quality properties facilitate its use in a wide range of applications. Extremely powerful and reliable these modules have high-efficient polycrystalline cells.

- | Cells embedded in EVA (ethylene vinyl acetate) ensure a long-term performance
- | The solar glass on the front side raises the UV resistance and improves the insulation
- | Using waterproof film extends the outdoor use
- | Its sturdy, aluminium frame offers a higher resistance
- | Modules are equipped with MC IV connectors to enable fast and safe installation
- | 5-year product warranty¹
- | 12 year warranty on 90 % of the minimum power¹
- | 25 year warranty on 80 % of the minimum power¹
- | IEC 61215 and IEC 61730 in process



Solar tracker



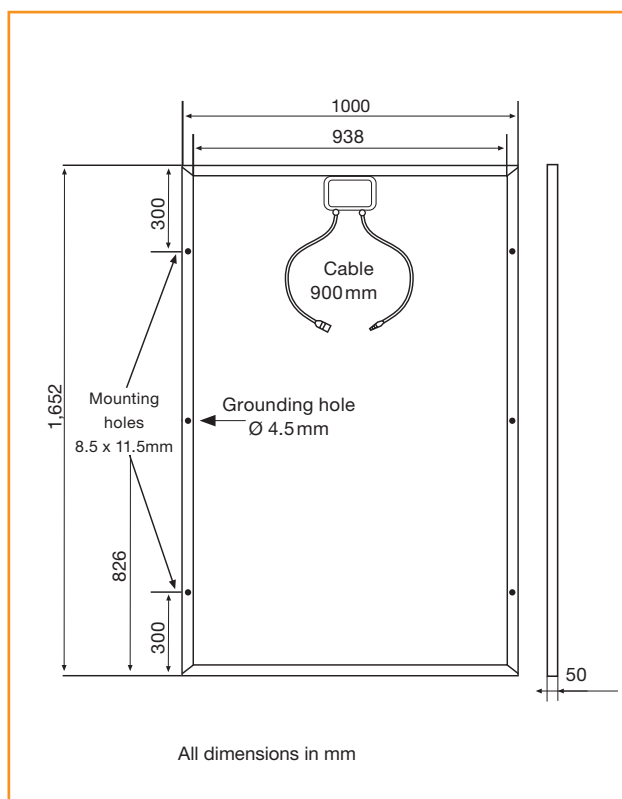
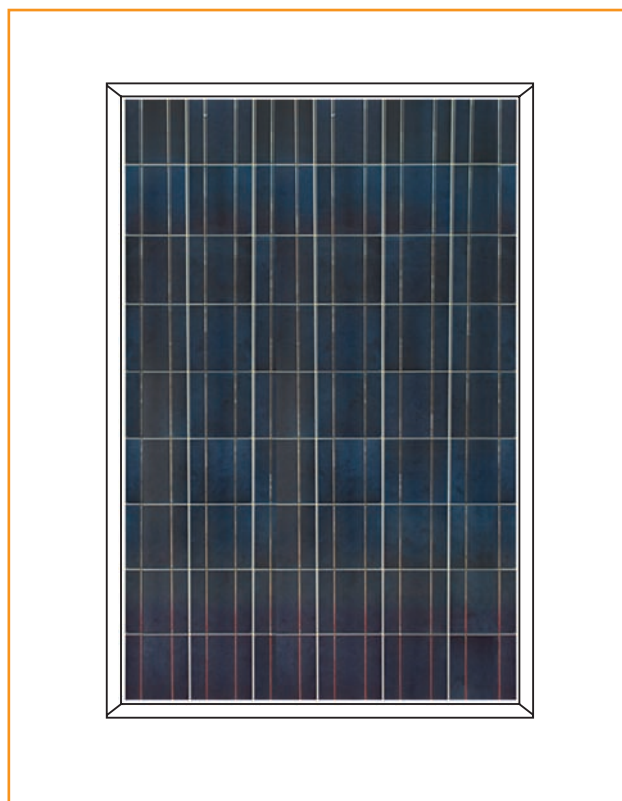
Solar home



Power plant

These modules can be used in a wide range of applications. Ideal for power plant, solar home or flat roof these modules offer you the best solution for your On-Grid installation.

We suggest you connect this module with one of our reliable and flexible IPG Inverters. For every type and sizes of application, we offer secure and durable mounting systems. Whether pitched roof, flat roof, open field, pole top or custom-made installation – Conergy mounting systems are designed to suit all individual requirements.



¹ According to current Conergy warranty conditions



Electrical specifications	P 210PA	P 215PA	P 220PA	P 225PA	P 230PA
Nominal power (P_{NOM}) as per STC¹	210 W	215 W	220 W	225 W	230 W
Tolerance	±3 %	±3 %	±3 %	±3 %	±3 %
Module efficiency	12.7 %	13.0 %	13.3 %	13.6 %	13.9 %
MPP voltage (V_{MPP})	29.7 V	29.7 V	29.8 V	29.0 V	30.0 V
MPP current (I_{MPP})	7.08 A	7.24 A	7.4 A	7.53 A	7.67 A
Open-circuit voltage (V_{OC})	36.2 V	36.4V	36.5 V	36.7 V	36.8 V
Short-circuit current (I_{SC})	7.82 A	7.97 A	8.12 A	8,18 A	8,34 A
Temperature coefficient (P_{MPP})	-0.53 %/°C	-0.53 %/°C	-0.53 %/°C	-0.53 %/°C	-0.53 %/°C
Temperature coefficient (V_{OC})	-0.127 V/°C	-0.127 V/°C	-0.128 V/°C	-0.128 V/°C	-0.129 V/°C
Temperature coefficient (V_{OC})	-0.35 %/°C	-0.35 %/°C	-0.35 %/°C	-0.35 %/°C	-0.35 %/°C
Temperature coefficient (I_{SC})	0.04 %/°C	0.04 %/°C	0.04 %/°C	0.04 %/°C	0.04 %/°C
Temperature coefficient (I_{SC})	3.1mA/°C	3.2mA/°C	3.2mA/°C	3.3mA/°C	3.3mA/°C
Maximum system voltage	1,000 V	1,000 V	1,000 V	1,000 V	1,000 V

Values at NOCT²

Nominal Power (P_{nom})	193 W	198 W	202 W	208 W	212 W
Module efficiency	11.7 %	12 %	12.2 %	12.6 %	12.8 %
MPP voltage (VMPP)	27.4 A	27.4 V	27.5 V	27.6 V	27.7 V
MPP current (IMPP)	7.05 A	7.25 A	7.38 A	7.55 A	7.68 A
Open-circuit voltage (VOC)	33.4 V	33.6 V	33.7 V	33.9 V	34.0 V
Short-circuit current (ISC)	7.85 A	8.0 A	8.15 A	8.2 A	8.35 A

Module dimensions

Dimensions (L x W x H)	1,652 x 1,000 x 50 mm
Weight	22 kg

Cell specifications

Cells	polycrystalline
Number of cells	60
Cell dimensions	156 x 156 mm

Junction box specifications

Safety rating	IP 65
DC plugs	MC IV

Available from:

¹ Standard Test Conditions, which are defined as follows: irradiance of 1,000 W/m² at a spectral density of AM 1.5 (ASTM E892). Cell temperature of 25 °C.

² Normal Operating Cell Temperature: irradiance of 0,8kW/m², 20°C ambient temperature, windspeed of 1 m/s