

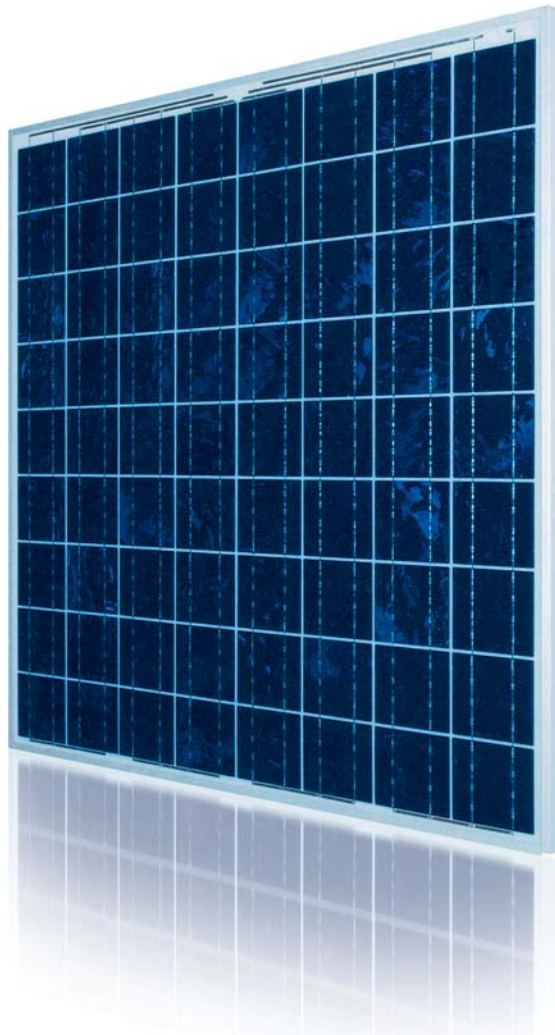
# PW1650 155, 165 and 175 Wp photovoltaic high efficiency multicrystalline module

24 V

72 multicrystalline 5 inch cells

Anodized aluminium frame

Cables & JBox



\* According to general warranty conditions.

The PW1650 is Photowatt Technologies' 5 inch high efficiency module. Thanks to its optimum size it is easy to handle and specifically dedicated to large scale grid connected applications. The PW1650 module uses Photowatt Technologies' multicrystalline technology. The solar cells are individually characterized and electronically matched prior to interconnection. Encapsulation beneath high transmission tempered glass is accomplished using an advanced, UV resistant thermal setting plastic. The encapsulant, ethylene vinyl acetate, cushions the solar cells within the laminate and protect the cells from etching. The rear surface of the module is completely sealed from moisture and mechanical damage by a continuous high strength polymer sheet.

The PW1650 is using a reinforced transparent anodised aluminium frame, designed to meet Photowatt Technologies' High Quality Standards for corrosion resistance (lifetime tested 3 times longer than requested by CEI 61215).

With a tolerance improvement to +/- 3%, the PW1650 module ensures more power homogeneity in installations, and a financial investment corresponding to the real power produced.

## APPLICATIONS

- Grid connection
- PV plants
- Building integration
- Industrial and agricultural buildings
- Solar Home Systems
- Water pumping

**Photowatt**  
TECHNOLOGIES

# PW1650 155, 165 and 175 Wp

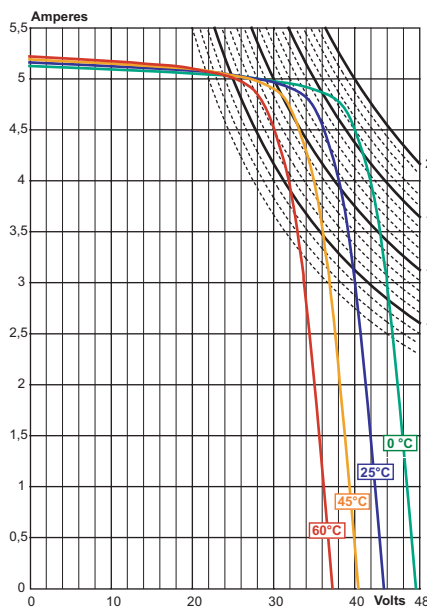
## ELECTRICAL CHARACTERISTICS

Encapsulation	glass / Tedlar		
Size of cells	125,50 x 125,50 mm		
Number of cells	72		
Voltage	24 V		
Number of by-pass diodes	4 by-pass diodes		
Typical power	155 Wp	165 Wp	175 Wp
Minimum power	150 Wp	160 Wp	170 Wp
Voltage at typical power	33,8 V	34,4 V	35 V
Current at typical power	4,6 A	4,8 A	5,0 A
Short circuit current	4,8 A	5,1 A	5,3 A
Open circuit voltage	43 V	43,2 V	43,4 V
Maximum system voltage	1000 V DC		
Temperature coefficient	$\alpha = + 1,46 \text{ mA}/^\circ\text{C}$		
	$\beta = - 158 \text{ mV}/^\circ\text{C}$		
	$\delta P / P = - 0,43 \% / ^\circ\text{C}$		
Power specifications at	1000 W/m <sup>2</sup> : 25°C : AM 1,5		

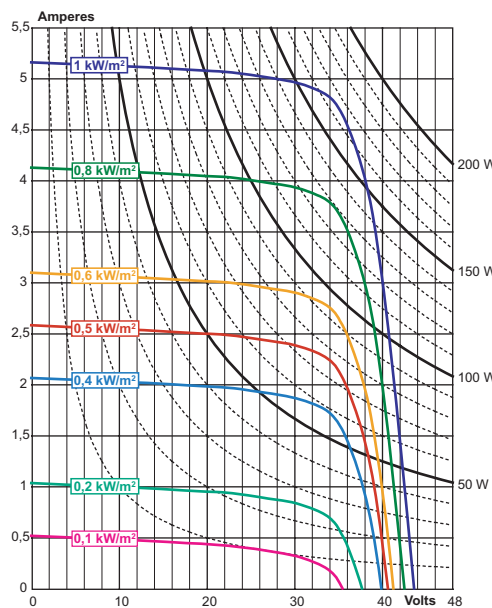
## PACKING INFORMATION

Module weight	18 Kg
Module size with cables	1237 x 1082 x 38 mm
Module size with Jbox	1237 x 1082 x 45 mm
Packing configuration	2 modules per carton
Packing size	1360 x 1110 x 100 mm
Modules packed weight	39 kg
Maximum pallet size (36 modules)	1360 x 1110 x 1950 mm
Maximum pallet weight (36 modules)	717 kg

## CURVES OF THE 165 Wp

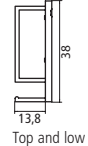
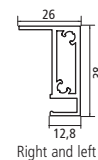
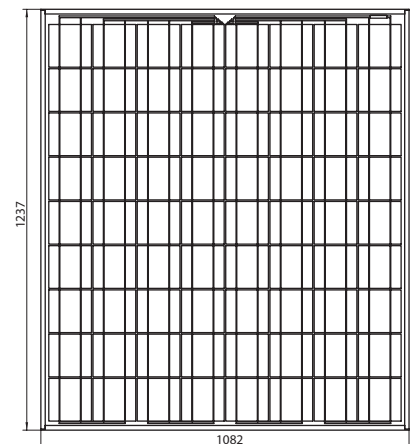


I=F(V) à E = 1kW/m<sup>2</sup>, AM = 1,5 according to junction temperature



I=F(V) à T = 25°C en fonction according to irradiance E (kW / m<sup>2</sup>), AM 1,5

## FRONT SIDE



## BACK SIDE WITH CABLES

