

# PW1650

The high efficiency photovoltaic module for all your applications



## Photowatt®. Bringing solar systems to life

The only vertically integrated French manufacturer of photovoltaic systems and an acknowledged key player in this market for 30 years, Photowatt® has total control of its production, in terms of component quality, cost management, competitiveness, low CO<sub>2</sub> emissions, secure supplies and compliance with schedules.

## PW1650, for all your applications

Tested by Photon and voted the best module in 2007 and second in 2008, the PW1650 module has been specifically developed for grid-connected applications. Thanks to its optimum size the PW1650 is easy to handle and uses Photowatt® Technologies' multicrystalline cell technology.

The module is manufactured using 3.2 mm tempered glass on the front surface and a UV resistant tri-layer polymer for the rear surface so providing high level resistance and reliability.

## APPLICATIONS

PV arrays  
Solar power plants

Industrial buildings  
Agricultural buildings

## BENEFITS

 French manufacture with low CO<sub>2</sub> emissions

 Tolerance improvement 0 / +5 Wp

  
1  
2007  
2  
2008  
First in 2007 and 2<sup>nd</sup> in 2008 in performance tests carried out by the independent magazine Photon.



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## ELECTRICAL CHARACTERISTICS

Encapsulation	Glass / TPT ou PVDF					
Size of cells	125 X 125 mm					
Number of cells	72					
Voltage	24 V					
Bypass diodes	4					
Tolerance improvement	0 / + 5 Wp					
Typical power	Wp	165	170	175	180	185
Voltage at typical power	V	34.4	34.7	35	35.3	35.6
Current at typical power	A	4.8	4.9	5.0	5.1	5.2
Open circuit voltage	V	43.2	43.3	43.4	43.5	43.6
Short circuit current	A	5.1	5.2	5.3	5.4	5.5
Maximum system voltage	V	1000V DC				
Temperature coefficient	$\alpha$ (Isc) =	+0.034%/°C				
	$\beta$ (Voc) =	-0.36%/°C				
	$\delta$ (Pm) =	-0.43 % /°C				
NOCT	47.1°C ± 2					
Power specifications under STC (Standard Test Conditions 1000 W/m² : 25°C : AM 1.5)						

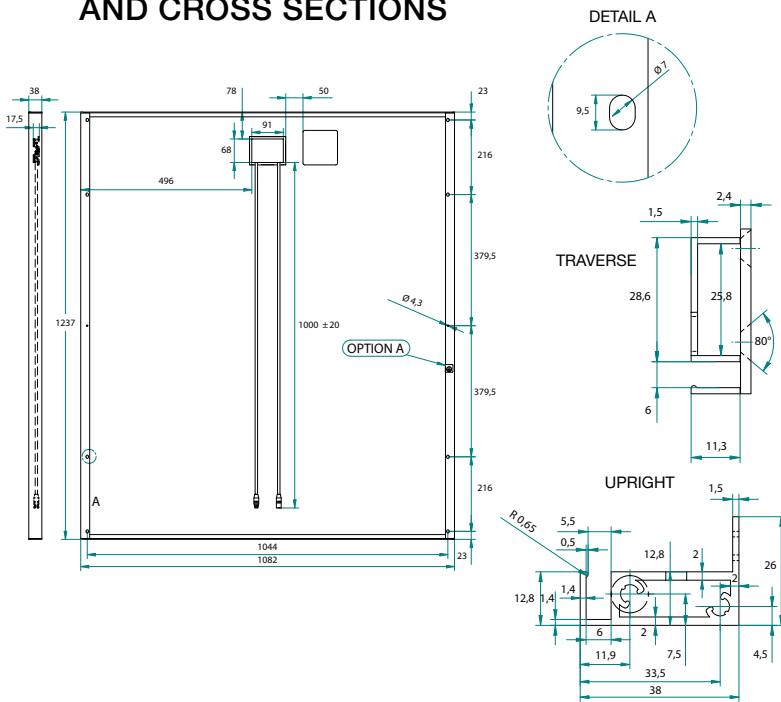
## PACKING INFORMATION

Module weight	kg	18
Module size with cables	mm	1237 x 1082 x 38
Packing configuration	modules	2 per box
Packing size	mm	1360 x 1110 x 100
Packed weight	kg	39
Maximum pallet size (36 modules)	mm	1360 x 1110 x 1950
Maximum pallet weight (36 modules)	kg	717

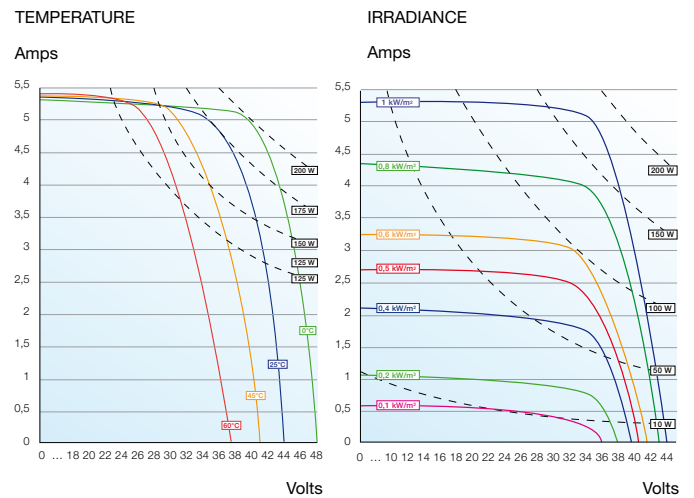
## WIRING

Solar cables	
Length	1000 mm
Section	4 mm <sup>2</sup>
Connector type	MC3

## REAR SURFACE AND CROSS SECTIONS



## CHARACTERISTIC CURVES 175 Wp



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ISO 9001 Certification



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