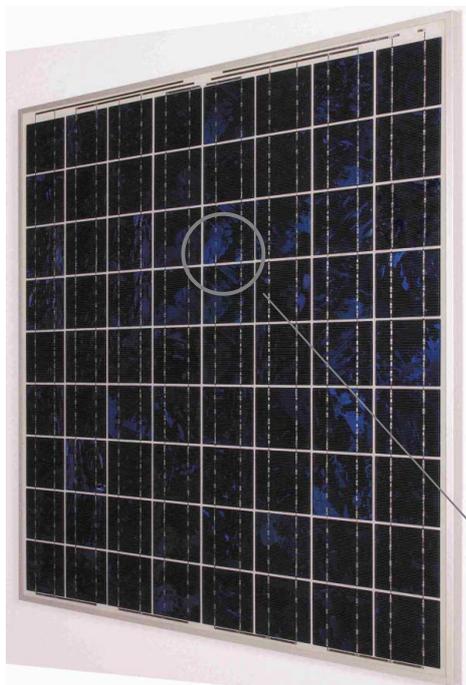
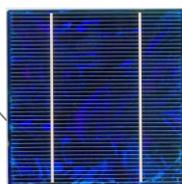


# PW1650- 12/24 V HIGH EFFICIENCY PHOTOVOLTAIC MODULE - JBox



- Grid connected system
- Water pumping
- Telecommunications
- Battery charging system
- Cathodic protection system
- Building integrated power system



The PW1650 is made of 8 x 9 high efficiency (up to 15%) 5 inch polycrystalline silicon solar cells (125,50 mm X 125,50 mm), with a silicon nitride anti-reflective coating.

The PW1650 is Photowatt's 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's 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's 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.

A 12V version and a UL version are available on request.

**POWER TOLERANCE : +/- 3%    EFFICIENCY WARRANTY : 25 YEARS\*    PRODUCT WARRANTY : 5 YEARS \***

PW1650		24 V Configuration			12 V Configuration		
Typical power	W	155	165	175	155	165	175
Minimum power	W	150	160	170	150	160	170
Voltage at typical power	V	34	34,4	35	17	17,2	17,5
Current at typical power	A	4,6	4,8	5	9,2	9,6	10
Short circuit current	A	4,8	5,1	5,3	9,6	10,2	10,6
Open circuit voltage	V	43	43,2	43,4	21,5	21,6	21,7
Maximum system voltage	V	<b>770V DC</b>					
Temperature coefficient		$\alpha=+1,46 \text{ m A/}^\circ\text{C}$ ; $\beta=-158 \text{ m V/}^\circ\text{C}$ ; $\gamma P/P=-0,43 \text{ \% /}^\circ\text{C}$			$\alpha=+2,92 \text{ m A/}^\circ\text{C}$ ; $\beta=-79 \text{ m V/}^\circ\text{C}$ ; $\gamma P/P=-0,43 \text{ \% /}^\circ\text{C}$		

Power specifications at 1000 W/m<sup>2</sup> : 25°C : AM 1,5



\*According to general warrantu conditions  
Datas subject to evolutions – Last update : 020903

