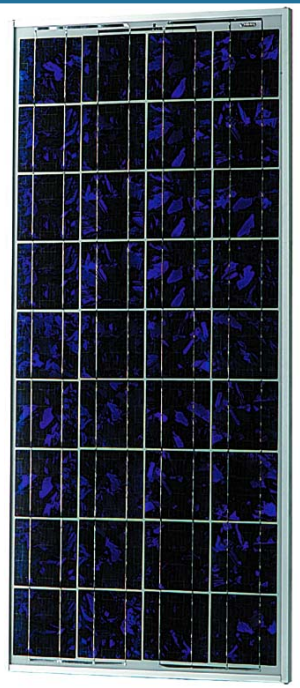
PHOTOWATT PW500 - 12V

PHOTOVOLTAIC MODULE – JBox



APPLICATIONS

- Telecommunications
- Cathodic protection
- Water pumping
- Signaling
- Rural electrification
- Private residences
- Commercial buildings
- Grid connected

- 4x9 polycristalline 4 inch cells (101,50 x 101,50 mm)
- Product warranty : 5 years*
- Efficiency warranty : 25 years*
- Quality insurance : ESTI (61215), ISO 9001...

IEC61215

PACKING INFORMATION		
Module weight	Kg	5,5
Module size with cables	mm	1042 x 462 x 45
Packing configuration	modules	6 per carton
Packing size	mm	1100 x 490 x 183
Modules packed weight	Kg	35
Maximum pallet size (96 modules)	mm	1150 x 1050 x 1600
Maximum pallet weight (96 modules)	Kg	570

The PW500 has an optimum configuration that fulfils the most demanding PV applications. Constant improvement in the output of photovoltaic cells has hallowed the PW500 to attain higher power level, guaranteeing optimum daily energy for minimum size.

The PW500 module uses Photowatt's multicrystalline technology. The solar cells are individually charecterized 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 strengh polymer sheet.

The self-supporting frame made from anodised aluminium was designed to allow to be easily mounted either from the front or from the rear.This module is available in double glass technology with the PWX500 which increased it's reliability providing the same electrical data.

For building integration, this module can be delivered without aluminium frame. Please contact us for further details.

PW500		12 V Configuration		
Typical power	**W**	45	50	55
Minimum power	**W**	40,1	45,1	50,1
Voltage at typical power	**V**	17	17,2	17,3
Current at typical power	**A**	2,65	2,9	3,2
Short circuit current	**A**	2,9	3,2	3,45
Open circuit voltage	**V**	21,4	21,6	21,7
Maximum system voltage	**V**	**600V DC**		
Temperature coefficient		α = +1,46 mA/°C ; β = -79 mV/°C ; γ P/P = - 0,43 % /°C		
Power specifications at 1000 W/m² : 25°C : AM 1,5				

* According to general warranty conditions

Photowatt TECHNOLOGIES

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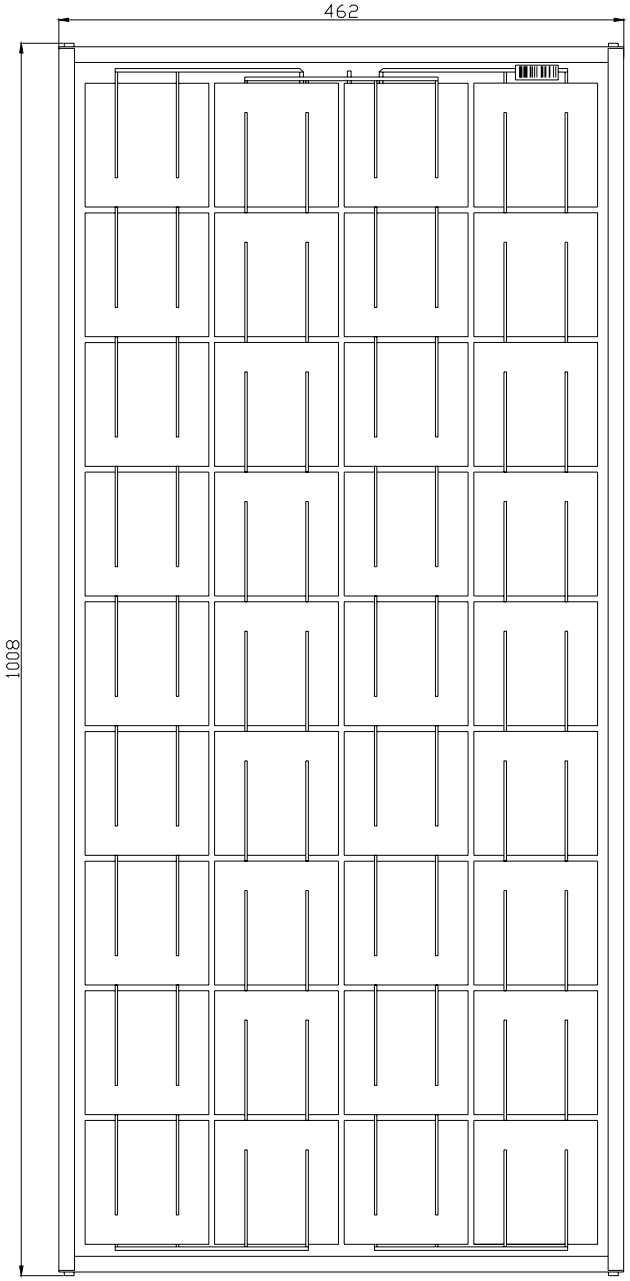
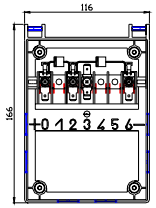
PW500- DIMENSIONS

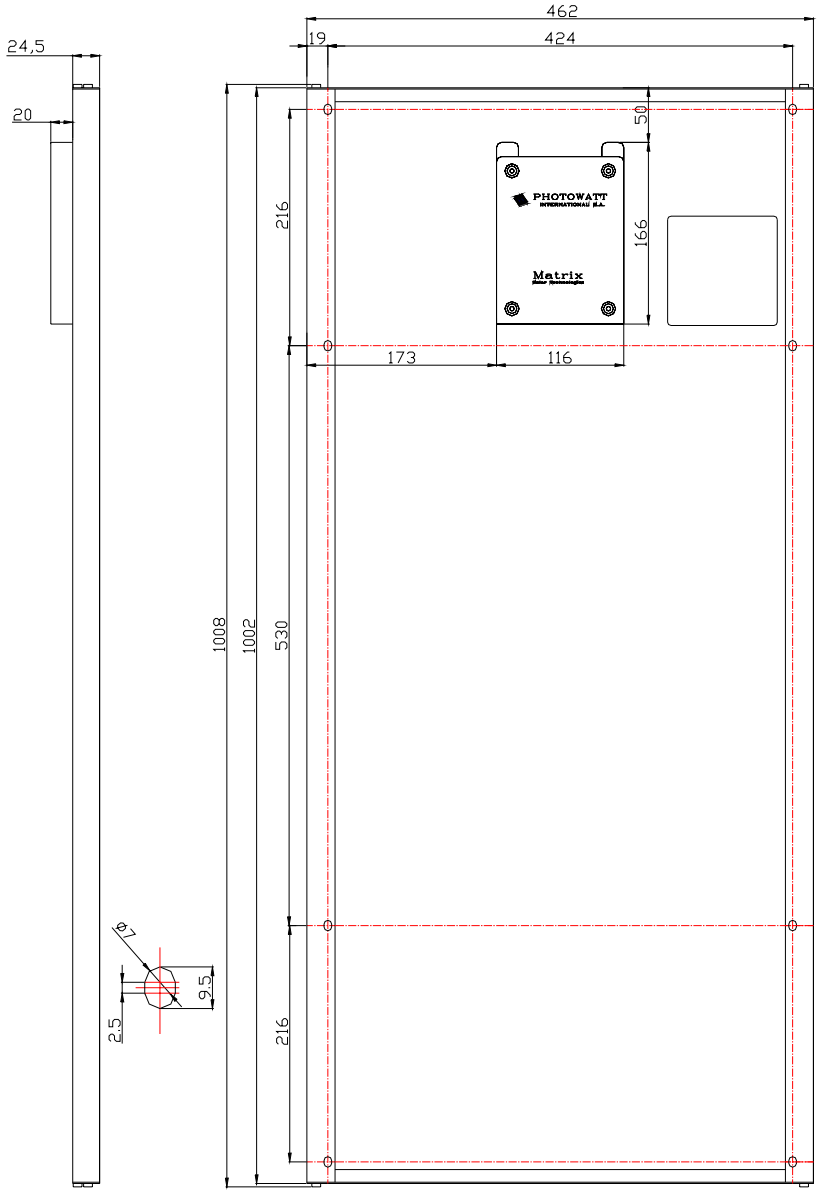


JBOX DETAILS

The universal junction box accepts cables from 1,5 mm² to 4 mm² (AWG 11 to AWG16)

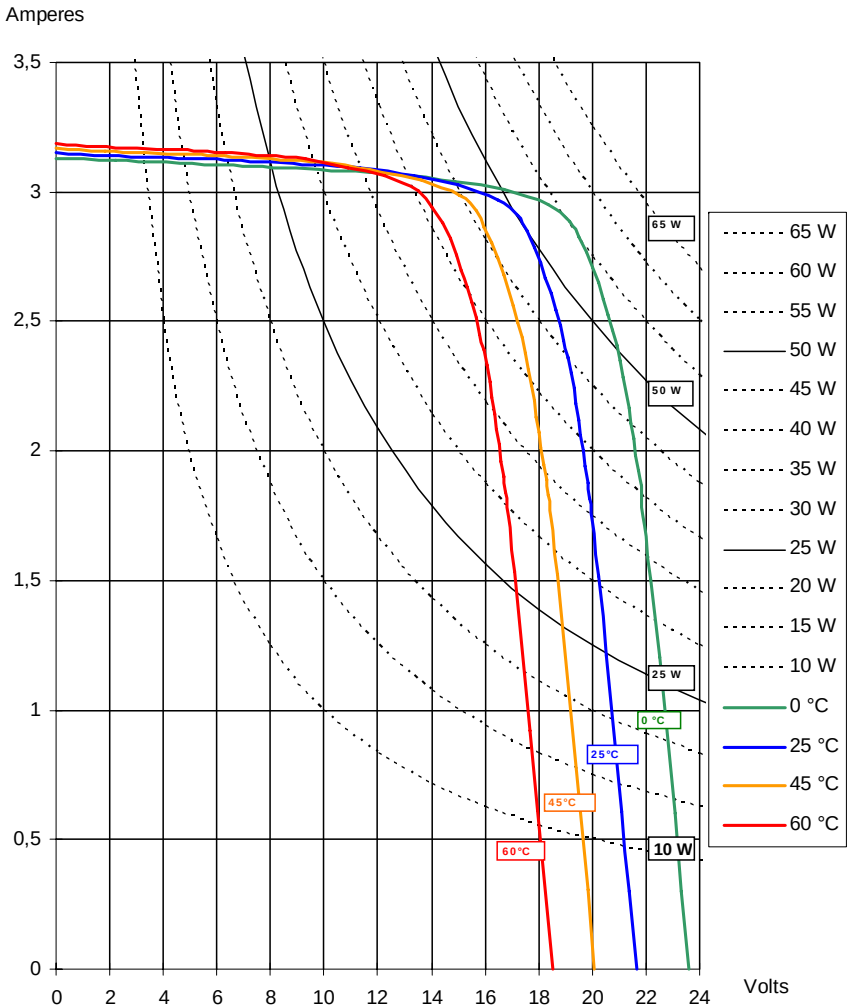


Module protected by 2 by-pass diodes (1 by pass per 18 cells)



PW500 – CHARACTERISTICS Ptyp : 50 Watts (12V)

I=F(V) à E=1 kW/m², AM=1,5 en fonction de la température



I=F(V) à T = 25°C en fonction de l'irradiance E (kW / m2), AM 1,5.