



PHOTOWATT PWX500 - 12V

PHOTOVOLTAIC MODULE HIGH RELIABILITY- JBox

POLYCRYSTALLINE MODULE – HIGH RELIABILITY



APPLICATIONS
- Telecommunication
- Cathodic protection
- Hospitals, clinics
- Pumping
- Community lighti,g
- Signaling
- Rural electrification
- Grid connection

- High reliability module
- 4x9 polycrystalline 4 inch cells (101,50 x 101,50 mm)
- **Product warranty : 5 years***
- **Efficiency warranty : 25 years***
- **Quality insurance : ESTI (61215), TÜV (Safety Class II), PVGap, ISO 9001...**

The PWX500 is designed with the double glass technology, with an optimum configuration that fulfils the most demanding PV applications. That type of heavy-duty construction ensures the product electrical isolation and high durability, including in marine and tropical environments.

The PWX500 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 protects the cells from etching. The PWX500 benefits from excellent mechanicals properties and reliability thanks to its glass both sides.

The self-supporting frame made from anodised aluminium was designed to allow it to be easily mounted either from the front or from the rear.

This module is available in glass / tedlar technology with the PW500 which minimize the weight while providing the same electrical datas.

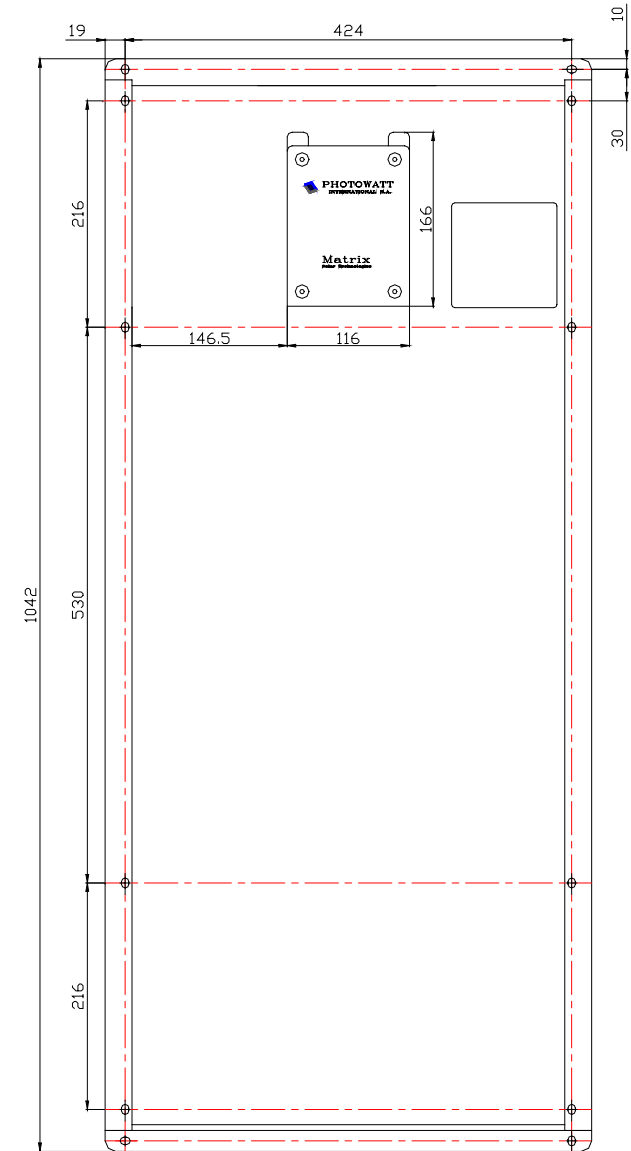
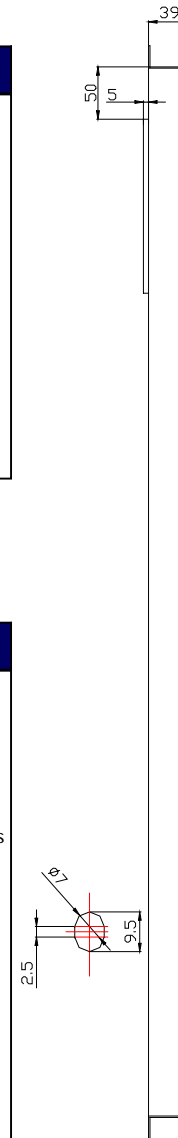
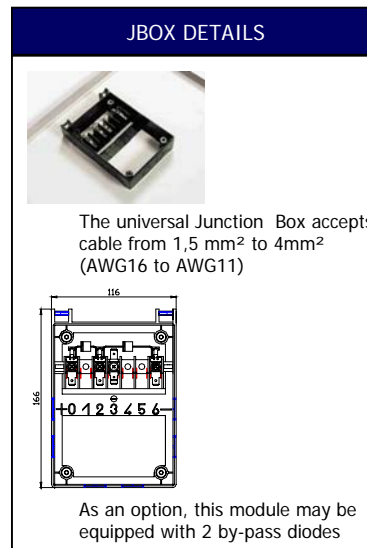
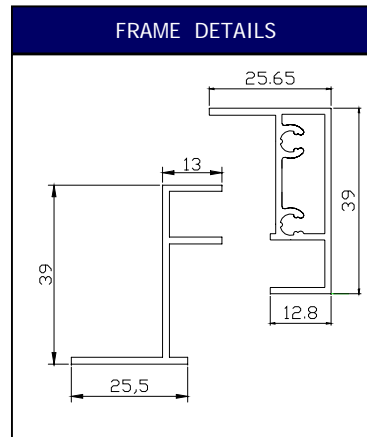
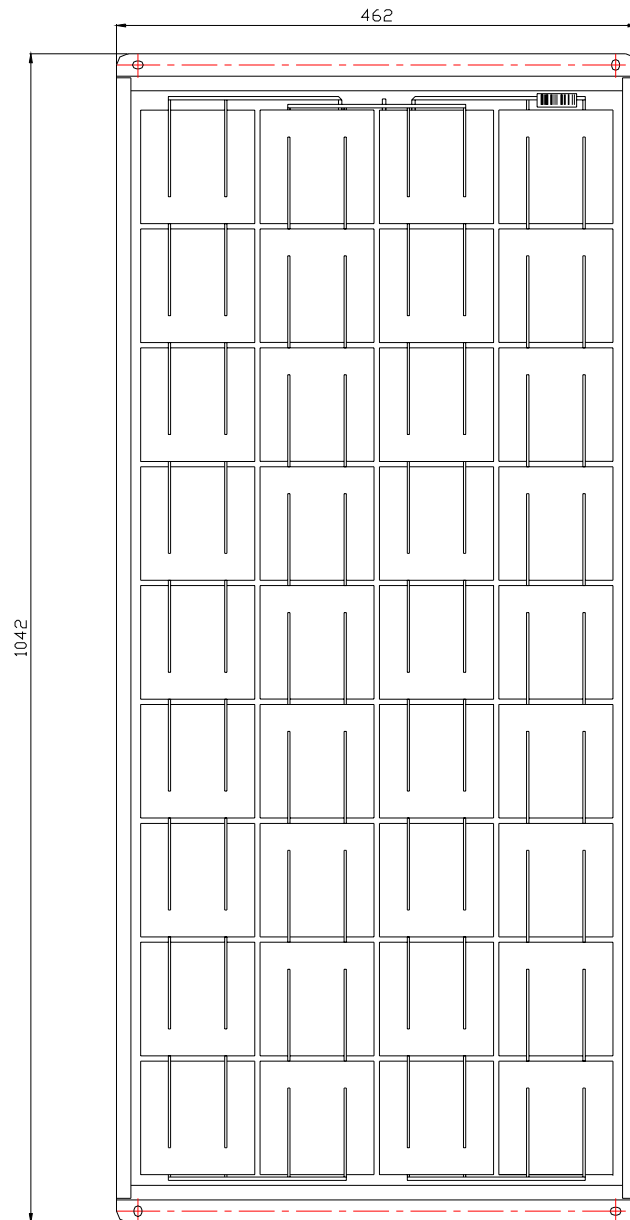
For building integration, this module can be delivered without aluminium frame. Please contact us for further details.



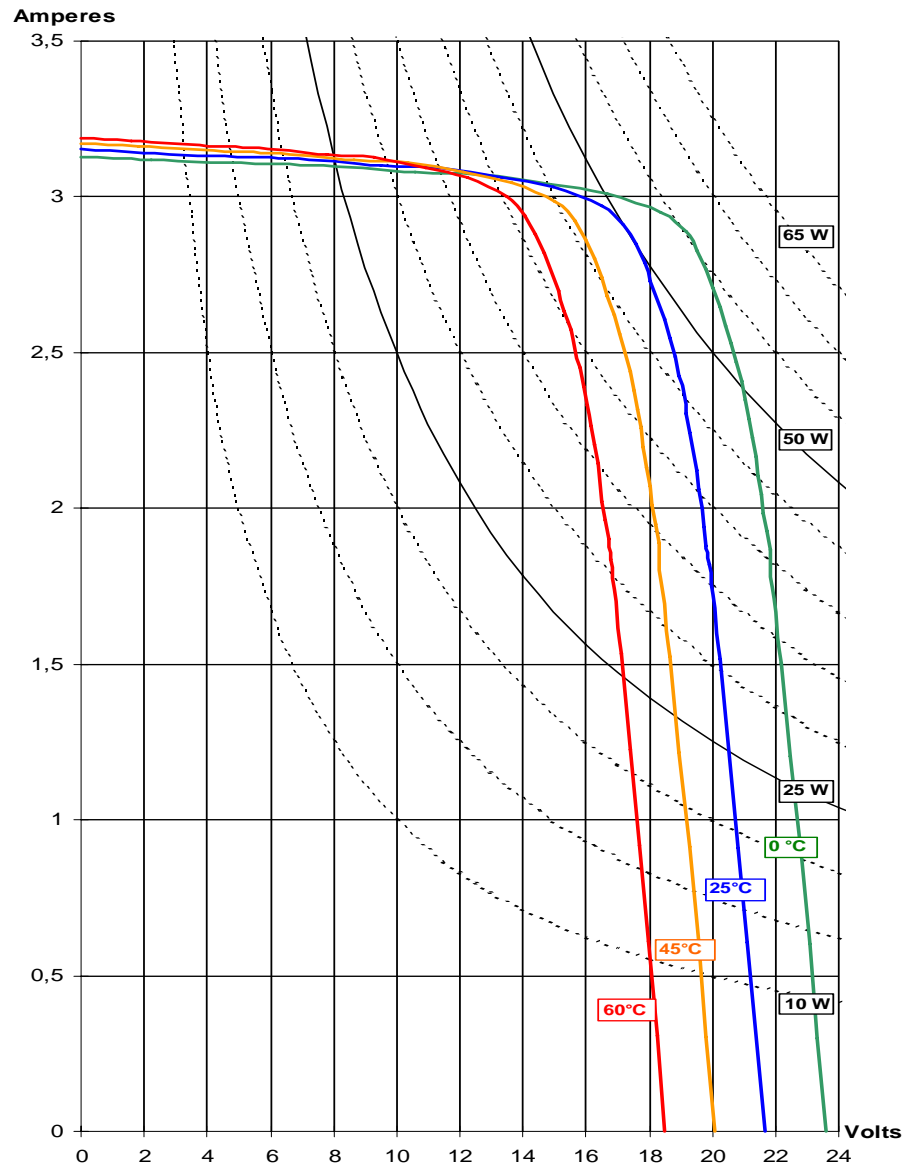
PACKING INFORMATION		
Module weight	Kg	9,2
Module size	mm	1042 x 462 x 39
Packing configuration	modules	4 per cartons
Packing size	mm	1090 x 490 x 183
Modules packed weight	Kg	40
Maximum pallet size (24 modules)	mm	1150 x 1050 x 1600
Maximum pallet weight	Kg	650

PWX500	12 V Configuration			
Typical power	W	45	50	55
Minimum power	W	40,1	45,1	50,1
Voltage at typical power	V	16,9	17,2	17,3
Current at typical power	A	2,65	2,9	3,2
Short circuit current	A	2,95	3,1	3,45
Open circuit voltage	V	21,6	21,6	21,7
Maximum system voltage	V	600V DC		
Temperature coefficient		$\alpha = +0,95 \text{ mA}/^\circ\text{C}$; $\beta = -79 \text{ mV}/^\circ\text{C}$; $\gamma \text{ P/P} = -0,43 \% /^\circ\text{C}$		
Power specifications at 1000 W/m² : 25°C : AM 1,5				

* According to general warranty conditions



$I=F(V)$ à $E=1 \text{ kW/m}^2$, $AM=1,5$ as a function of the junction temperature



$I=F(V)$ à $T = 25^\circ\text{C}$ as a function of the irradiance E (kW / m²), AM 1,5.

