



**your projects
our performance
ambitions beyond horizons**



Reliability

- We honour our **commitments** at every stage, and from design of your project through to final installation, our **customers service** remain **attentive** to your needs.
- Our materials and assembly **expertise** and production processes make you confident of **25 years power warranty** as a minimum.

Competitiveness

- The $\pm 3\%$ tolerance of our products ensures that **your installations are consistent** and financial investment is effective down to the last penny.
- From silicon melting to module production, as the **first** vertically integrated **French manufacturer**, we rank among the **most competitive companies** on the world market.

Quality

- We draw upon our **25 years of experience** throughout the world to improve the **technical level** of our modules on a day-to-day basis.
- The high-strength technology of our **double-glass range** is ideal to withstand **marine and tropical environments**.

January 2005 - EDIP publica - RC Verme B 695 690 894 - Couv. - MITEK Imaginaire - Photos: C. Pédrot, ADEME, Saunier, Gecklein. The specifications of the products in this document are provided for information purposes and are not contractually binding. Always try to improve the quality of its products. Photowatt reserves the right of changing the specifications without prior notice.

Photowatt also means...

Stand alone generators Photowatt **autonomous generators**, based on our **turnkey know-how**, meet the requirements of **telecom projects, oil and gas applications, signalling, etc.**

Grid connected systems In response to your **standard grid connection projects**, Photowatt has developed the **ElectraSun® solar kit** - a modular **turnkey system** available to all.

Photowatt's System business activity Photowatt controls **photovoltaic project management**, sizing, generators set design, equipment supply, installation and training, etc.

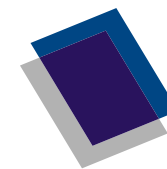
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MODULES



PHOTOWATT

Solutions for natural power

Mastered quality ■ Optimized efficiency ■

- With three ranges of multicrystalline modules and one range of monocrystalline modules, Photowatt provides a solution to each of your need, from 12 to 230Wp.
- With a reliable distributors network and our partners competencies, each of our customers becomes a privileged interlocutor.
- 25 years of performance warranty, 5 years of product warranty, together with a very attentive customers service enable Photowatt to assure a total respect of its commitments.

Certified Competitiveness ■ Held Commitments ■

our range of multicrystalline modules



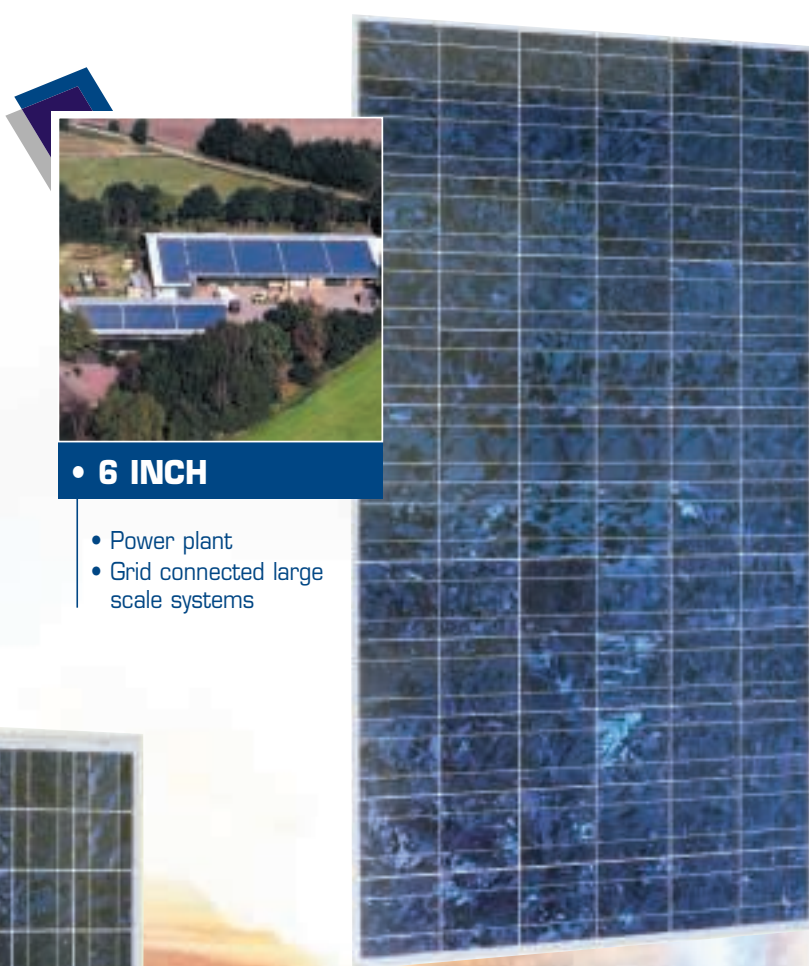
our range of monocrystalline modules

Polycrystalline - 6 inch range

MODULES		Compact modules		PWG-230	PWG-123	PWG-110
Encapsulation				glass / tedlar	glass / tedlar	glass / tedlar
Size of cells	mm			150 x 150	150 x 150	150 x 150
Number of cells	pcs			72	36	36
Typical power*	W			230	123	110
Minimum power	W			223	119	106
Nominal battery voltage	V			24 (12 optional)	12	12
Voltage at typical power*	V			34,9	17,6	17,2
Current at typical power*	A			6,6	7	6,4
Open circuit voltage*	V			43,6	21,9	21,7
Short circuit current*	A			7,2	7,6	6,9
Noct (0,8 kW/m², 20 °C, 1 m/s)	°C			45 Power +5/-3 %	45 Power ±3 %	45
Connection				Cable or JBox	Cable or JBox	Cable or JBox
Diodes				4 by-pass	2 by-pass	2 by-pass
FRAME	Length			1885	1424	1424
	Width			962	655	655
	Depth			38	38	38
	Depth with junction box			45	45	45
Weight (net)	kg			25	12,5	12,5
Operational & Storage Temperature	°C			- 40 / + 85	- 40 / + 85	- 40 / + 85



25 year* warranty
* According to general warranty conditions. Contact us for marine and tropical environments.



- 6 INCH
- Power plant
- Grid connected large scale systems

Polycrystalline - 5 inch range

MODULES		PW850 PWX850			PW1250			PW1650		
Encapsulation		glass / tedlar or double-glass			glass / tedlar			glass / tedlar		
Size of cells	mm				125,50 x 125,50					
Number of cells	pcs	36			54			72		
Typical power*	W	75	80	85	115	125	135	155	165	175
Minimum power	W	70,1	75,1	80,1	110	120	130	150	160	170
Nominal battery voltage	V	12			18			24 (12 optional)		
Voltage at typical power*	V	17,0	17,3	17,6	25,4	25,9	26,4	34	34,4	35,0
Current at typical power*	A	4,4	4,6	4,8	4,5	4,8	5,1	4,6	4,8	5,0
Open circuit voltage*	V	21,5	21,6	21,6	31,9	32,3	32,4	43	43,2	43,2
Short circuit current*	A	4,7	5,0	5,2	4,7	5,0	5,3	4,8	5,1	5,3
Noct (0,8 kW/m², 20 °C, 1 m/s)	°C	45			45			45		
Connection		JBox			Cable or JBox			Cable or JBox		
Diodes		2 by-pass			3 by-pass			4 by-pass		
FRAME	Length	1237			1237			1237		
	Width	556			822			1082		
	Depth	24,5			38			38		
	Depth with junction box	45			45			45		
Weight (net)	kg	7,8	13		12,5			18,0		
Operational & Storage Temperature	°C	- 40 / + 85			- 40 / + 85			- 40 / + 85		



- 5 INCH
- Grid connected systems
- Building integration
- Water pumping...

Polycrystalline - 4 inch range

MODULES		PW100 PWX100		PW200 PWX200		PW500 PWX500			PW1000		
Encapsulation		glass / tedlar or double-glass		glass / tedlar or double-glass		glass / tedlar or double-glass			glass / tedlar		
Size of cells	mm	50,6 x 50,6		101,25 x 50,6		101,25 x 101,25			101,25 x 101,25		
Number of cells	pcs	36		36		36			72		
Typical power*	W	12		22		45	50	55	100	105	110
Minimum power	W	10		18		40,1	45,1	50,1	95,1	100,1	105,1
Nominal battery voltage	V	12		12		12			24 (12/24 optional)		
Voltage at typical power*	V	17,0		17,0		16,9	17,2	17,3	34,4	34,6	34,8
Current at typical power*	A	0,65		1,3		2,65	2,9	3,2	2,9	3,05	3,15
Open circuit voltage*	V	21,5		21,5		21,6	21,6	21,7	43,2	43,2	43,4
Short circuit current*	A	0,72		1,44		2,95	3,1	3,45	3,0	3,15	3,4
Noct (0,8 kW/m², 20 °C, 1 m/s)	°C	45		45		45			45		
Connection		Cable or JBox	JBox	Cable or JBox	JBox	JBox			JBox		
Diodes		no		no		2 by-pass optional			3 by-pass (4 optional)		
FRAME	Length	546		582		551		720	1007		1042
	Width	256		262		462		370	462		673
	Depth	24,5		39		24,5		39	24,5		24,5
	Depth with junction box	-		45		-		45	45		45
Weight (net)	kg	2,2	3,4	3,4	5,2	5,5	9,2		10,5		
Operational & Storage Temperature	°C	- 40 / + 85		- 40 / + 85		- 40 / + 85			- 40 / + 85		



- 4 INCH
- Remote areas
- Rural electrification
- Telecommunication
- Traffic signs
- Public lighting...

Monocrystalline range



- MONOCRYSTALLINE RANGE
- Grid connected systems
- Building integration
- Water pumping...

MODULES		PWM1650		PWM1700	
Encapsulation		glass / tedlar		glass / tedlar	
Size of cell	mm	125 x 125 / Ø 150		125 x 125 / Ø 165	
Number of cells	pcs	72		72	
Typical power*	W	165	175	170	180
Minimum power	W	160	170	165	175
Nominal battery voltage	V	24 (12 optional)		24 (12 optional)	
Voltage at typical power*	V	35,2	35,4	35,2	35,4
Current at typical power*	A	4,7	4,95	4,85	5,1
Open circuit voltage*	V	44,4	44,6	44,4	44,6
Short circuit current*	A	5,1	5,3	5,3	5,5
Noct (0,8 kW/m², 20 °C, 1 m/s)	°C	45		45	
Connection		Cable or JBox		Cable or JBox	
Diodes		4 by-pass		4 by-pass	
FRAME	Length	1237		1237	
	Width	1082		1082	
	Depth	38		38	
	Depth with junction box	45		45	
Weight (net)	kg	18		18	
Operational & Storage Temperature	°C	- 40 / + 85		- 40 / + 85	

*STC (Standard Test Conditions) : 1000 W/m², AM 1,5 @ 25 °C

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