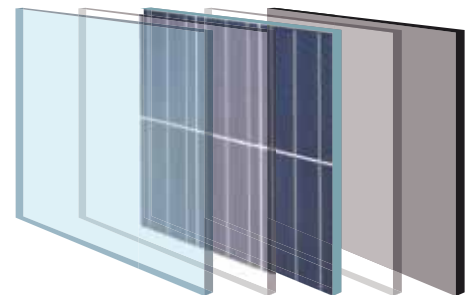


50 cells - Standard or Solrif frame

5 strings of 10 polycrystalline cells



1. Solar quality glass
2. EVA
3. Cells
4. EVA
5. Tedlar (PVF)

Solar quality glass, thickness 4 mm,

Resistance to extreme climatic conditions (5400 pa),

Assembly Verre-EVA-Backsheet made under vacuum for an excellent encapsulation of the cells,

3 bus bar connect cells together for a high efficiency



Certifications IEC 61215 et IEC 61730 parts I and II.
Security class II.
Manufacturer guarantee : 10 years.

Guarantee of functioning :

- 90% during 12 years.
- 80% during 25 years.

MEMBER



ALLIANCE
QUALITÉ
PHOTOVOLTAÏQUE

Polycrystalline modules

Photovoltaic panels	50 P 190	50 P 195	50 P 200	50 P 205* (1)
Maximum Power at STC (Pmax)	190	195	200	205
Power tolerance**	+/- 3%			
Color of backsheet	White			
Module's efficiency per m2 (%)	13,75	14,1	14,45	14,8
Kind of cells	Polycrystallines			
Number of cells	50			
Cells dimensions (mm)	156 x 156			
Normal Operating Cell Temperature (Noct)	45 +/- 1°C			
Maximum System Voltage	1000 V			
Optimum Operating Voltage Vpm (V)	24.2	24.55	24.8	24.85
Optimum Operating Current Ipm (A)	7.85	8	8.1	8.25
Open - Circuit Voltage Voc (V)	30.25	30.5	30.8	30.85
Short - Circuit Current Isc (A)	8.4	8.55	8.65	8.75
Maximal Admissible Reverse Current (A)	15			
Number of by-pass diodes	3			
Impact of the cells temperature :				
Isc	+ 4.5 mA/°C			
Voc	- 104 mV/°C			
Pm = Ipm*Vpm	- 0.42 %/°C			
Operating temperature	-40...+85°C			
Connections	Lumberg type LC4			

According to conditions of standardized test (STC): period of sunshine of 1000 W / m2, AM 1.5, temperature of cells 25°C.

* Subject to availability of cells. Consult SILLIA Energie before any order.

** Other electrical tolerances +/-10%

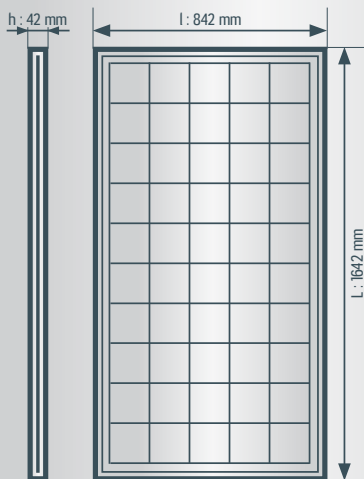
(1) Production with an Anti Reflections Coating Glass

MECHANICAL CHARACTERISTICS

Standard frame (anodized aluminium)

Module's weight : 19 kg

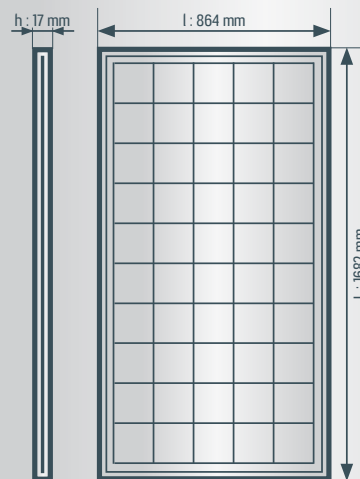
Cable's length : 2 x 1 m



Solrif frame

Module's weight : 17,5 kg

Cable's length : 2 x 1,20 m



	L	l	h
Dimensions (mm)	1642	842	42

Portrait or landscape orientation - Dimensions +/- 2.5 mm

	L	l	h
Dimensions of installation (mm)	1663	832	17
Dimensions (mm)	1682	864	17

Landscape orientation