ROOF Collection

RTL-CS

System Photonics' photovoltaic tiles can replace or be integrated with a traditional roof, maintaining or improving its insulating and protective covering. These aesthetic, sturdy and reliable products are intended specifically for applications on roofs. This is the best choice for a photovoltaic roof that does not compromise between aesthetics and functionality.

Benefits

Architectural integration
System Photonics' photovoltaic tiles are perfect for architectural integration as they have no aluminum frame and are also elegant and sturdy. The tiles come in 13 different colors and their passive elements, made in the same size and with the same ceramic material as the active module, make for solutions that were thought to be impossible until today.

Technological innovation
The use of a thin 3mm ceramic back sheet and an encapsulant 5 times harder and 100 times more resistant than those normally used (EVA, PVB) guarantees unparalleled durability and reliability.

Ease of installation
The module is extremely easy to install in the place of normal tiles, guaranteeing a **cascade installation** with waterproofing of the roof up to an angle of 3° even without the use of sheathing, provided that channels are installed to collect and evacuate rainwater to the eaves. The **rails with** brackets are inserted between also make it extremely easy to install the tiles by simply applying them on the existing infrastructure.

System Photonics SpA has created the first ever photovoltaic system that can be perfectly integrated in the architecture and that combines the versatility of a ceramic sheet with the new generation of photovoltaic modules, bringing design to the forefront. This exclusive system, based on cutting edge technology, combines both aesthetics and functionality.

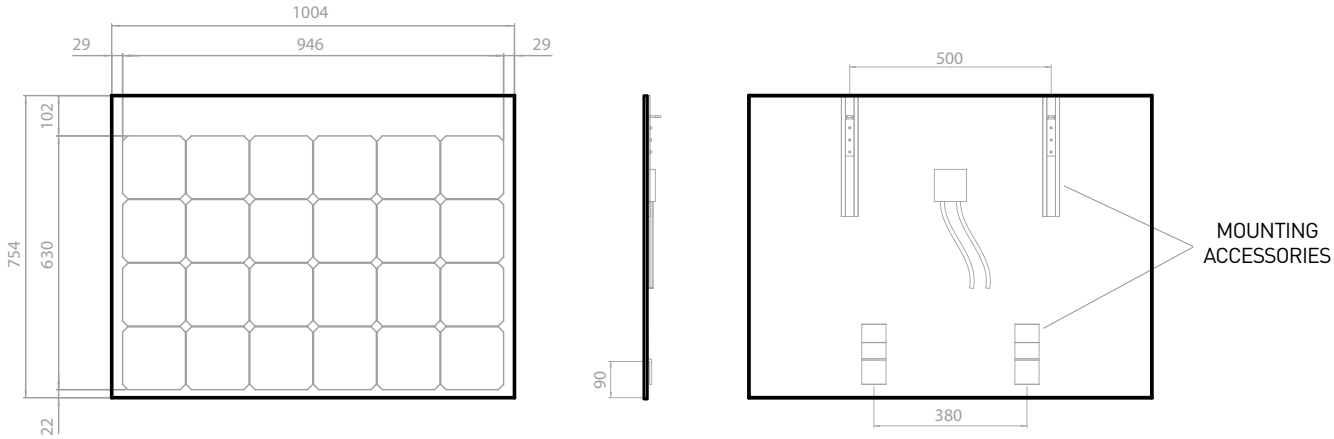
Electrical characteristics

The following were measured in standard test conditions (STC) with radiation at 1000W/m2, an air mass of AM 1.5 and cell temperature at 25°C

			RTL-CS 95
Rated power (+/- 3%)		Pnom	95 W
Open circuit voltage		Voc	16.25 V
Short-circuit current		Isc	8.40 A
Voltage at max power		Vmp	12.03 V
Current at max power		Imp	7.89 A
Max reverse current			12 A
Max system voltage		IEC	1000 V
Operating temperature		IEC	Tra -40 °C e +85 °C (-40 °F e +185 °F)
Temperature coefficients	Power	Pmp	-0.47 % / K
	Voltage	Voc	-0.36 % / K
	Current	Isc	+0.03 % / K
	NOCT*		44.5 °C

*Typical value measured with Black backsheet

Dimensions



Mechanical data

Cells	Type	Single-crystal silicon
	Number	24 cells (6 x 4)
Front cover		0,125" (3.2 mm) tempered glass
Junction box		IP-65 with 1 bypass diode
Outlet cables		Cable length: 39" (1000 mm) / MC4 connectors
Dimensions		39.52" x 17.87" x 0.32" (1004 mm x 754 mm x 8 mm) height of the junction box 0.87" (22 mm)
Weight		28.6 lb (13 kg)
Max load		Certified 5400 Pascal (112 lb/sq.ft.) Tested up to 700 kg/m² (143 lb/sq.ft.)

Warranties and Certifications

Warranty	25-year power warranty
	10-year product warranty
Certifications	IEC 61215
	IEC 61730 (safety test)
	Protection class II
	CE
Conformity	UNI EN 538 UNI EN 539-1 UNI EN 1024 UNI EN 539-2 UNI EN 1304

Available colours

The data is not binding and the company reserves the right to make modifications without prior notice.