SKIN Collection

SPL-AA

The photovoltaic tiles from System Photonics were designed for the construction of photovoltaic ventilated facades, thus exploiting the aesthetic and functional characteristics of this building technique. These are elegant, robust and reliable products, made to enhance the concept of "functional skin" which is central to modern architectural principles.

Benefits

Architectural integration
System Photonics photovoltaic tiles, by virtue of their elegant appearance, the absence of the aluminum frame, and their strength, are ideal for architectural integration. The availability of 13 colors and of passive tiles manufactured in the same size and with the same ceramic material, allows implementations that would have been unthinkable up to now.

Technological innovation
The use of a thin 3mm thick ceramic sheet as a back-sheet and the use of an encapsulant 5 times harder and 100 times stronger than those commonly used (EVA, PVB) are examples of the innovative drive of System Photonics, and make the product unique on the market.

Reliability without Compromise
Because of the care taken in our highly automated manufacturing process, the choice of quality highly recyclable materials such as ceramic, the use of the innovative encapsulant PV5316, and the desire to develop partnership only with suppliers with a strong track record in photovoltaics, we were able to develop a product that enters the market with a 25-year power performance warranty and a 10 year warranty for manufacturing defects.

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.

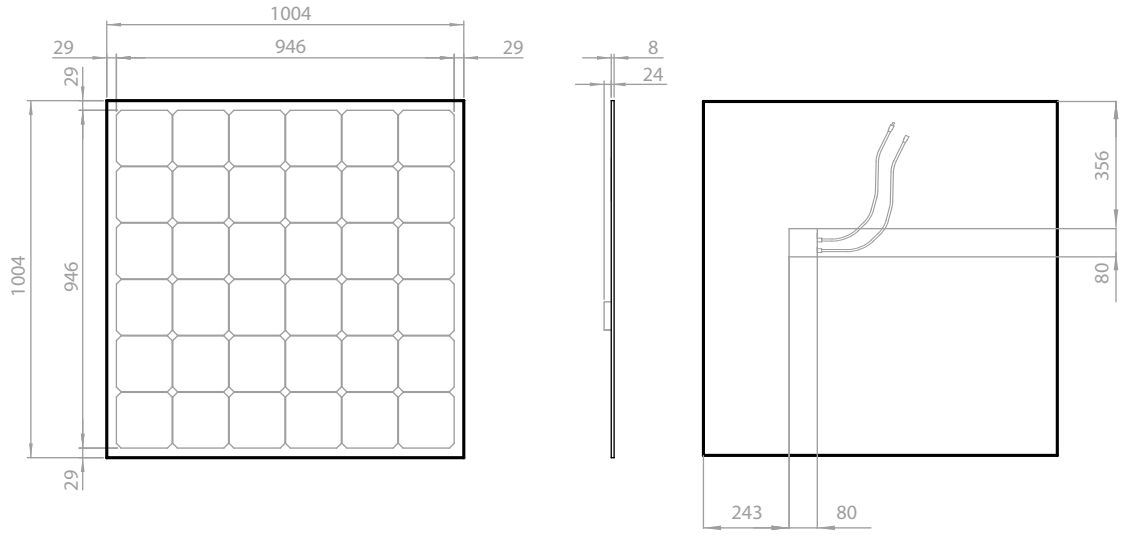
Electrical characteristics

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

			SPL- AA 135	SPL- AA 140
Rated power (+/- 3%)		Pnom	135W	140W
Open circuit voltage		Voc	23.1 V	23.1 V
Short-circuit current		Isc	8.13 A	8.14 A
Voltage at max power		Vmp	17.54 V	18.09 V
Current at max power		Imp	7.70 A	7.76 A
Max reverse current			12 A	
Max system voltage		IEC	1000 V	
Operating temperature		IEC	Between -40°F and +185°F (-40°C and +85°C)	
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	36 cells (6 x 6)
Front cover		0,125" (3.2 mm) tempered glass
Junction box		IP-65 with 2 bypass diodes
Outlet cables		Cable length: 39" (1000 mm) / MC4 connectors
Dimensions		1004 mm x 1004 mm x 8 mm - height of the junction box 22 mm
Weight		38,14 lb (17,3 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

Available colours

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