

ROBOT CLEANER  
OF PHOTOVOLTAIC,  
SOLARS PANELS  
AND GLASS ROOFS

# Opti+

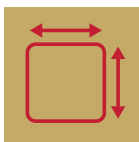


## Opti+ preserves up to 15% the performance of your solar panels



### **PV Cleaning Robot**

Opti+ is a remote controlled robot designed to clean solar installations on roof tops



### **High speed cleaning 400m<sup>2</sup>/h**

Opti+ operates at a speed of 30m/min .

[www.robot-optiplus.fr](http://www.robot-optiplus.fr)

# Optimize your electricity production

## Your Q&A

### Should we clean the solar panels?

Yes, indeed. Solar panels need a regular maintenance in order to keep their optimal performances.

Sand, dust and pollution accumulate on their surfaces, altering their production efficiency and at the same time reducing their life-span.

Rain is not enough to clean the solar panels, actually it even tends to hoard the dirt already there.

Our robot can use a wet or dry cleaning system depending on the weather conditions.

The performances of a regularly maintained panel will not decrease each year.

### How long does the cleaning take?

Our robot advances at a speed of 30 m/min, which allows it to clean up to 400 m<sup>2</sup> per hour in 2 passes (outward and return).

### Can it be used on all roofs

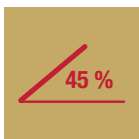
The maximum slope is 40%, which represents the majority of current roofs.

### What are the operating costs?

**Opti+** has a very low running cost, you just need to recharge your battery. The water consumption is 0,2 to 0,6 l/m<sup>2</sup>, much less than the conventional high pressure cleaning.

### Is it safe?

Of course it is. The brushes are specifically designed for this purpose, operators will not have to work on roofs anymore, comfortably controlling the robot from an elevating platform. The pressure applied by the **Opti+** robot is 60 g/cm<sup>2</sup>, thanks to its optimized weight.



### Slopes up to 45%

The rubber tracks allow the robot to go up and down steep slopes.



### Autonomy up to 8 hours (\*)

**Opti+** robot included two easy interchangeable batteries.

Specifications	OPTI+ <sup>5</sup>	OPTI+ <sup>5P</sup>
Overall dimensions (L x l x h) mm	1200 x 1500 x 430	900 x 1400 x 400
Weight	74kg	53kg
Brushes dia Ø180mm	Lg : 1100mm	Lg : 850mm
Irrigation system	6 nozzles	4 nozzles
Slopes	up to 40%	up to 45%
Water consumption	0,2 à 0,6l/m <sup>2</sup>	
Remote controled	yes	
Quick removal of brushes without tools	yes	
Dry cleaning with specially-designed brushes	yes	

(\*) According to geographic location

## Standards and guarantees

In accordance with the French legislation, the **Opti+** robot is guaranteed for one year, excl. travel and transport costs.(see General & Special Conditions of Sale).



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