



Technical Data Sheet – SolarCleano F1A

The SolarCleano F1A is the most agile autonomous cleaning robot on the market combining the platform predominance with 20% more cleaning capacity comparing to similar platforms and the cleaning scheduling robustness that the robot can provide. The SolarCleano F1A is a fast and efficient solution for cleaning solar panels autonomously without supervision.

The robot has been designed to be easily deployed on different kinds of solar plants, be it ground-mounted, large rooftops or trackers; it can be controlled autonomously by a local central coordinator (FMS). The robot is meant to work at night to avoid shading but can perform larger shifts to increase the cleaning capacity.

The SolarCleano F1A is:

- Battery-operated and autonomously recharged
- Autonomously moving from one panel row to the next with the support of the autonomous transporter
- Remote troubleshooting
- A robotic solution consisted of 5 modular components that allow the solution to be easily scalable according to the size and needs of each power plant. Namely:
 - F1A robotic platform(s)
 - Fleet Management System (FMS)
 - Inter-robot communication infrastructure
 - Charging station(s)
 - User Interface (UI)

- Efficient on all types of solar panels
- A large brush size solution that allows for thorough cleaning of the panel frames (usually the dirtiest). The two different types of fibre and their helical shape facilitate cleaning and leave no trace, helping the panels to achieve full efficiency

Features

Machine

Length	1450mm
Width	1300mm
Height	675mm
Press on the panels	4200Pa
Width of the brushes	1200mm
Diameter of the brushes	170mm

Movement system

Climbing capacity	20° (36%)
Speed	25m/min

Battery

Source	840W
Type	Lithium
Autonomy	4h

Brushes

Blue	Soft
Yellow	Standard
Green	Hard
Red	Very hard

Warranty	12 Months
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Repetitive, large scale, dry cleaning under harsh environmental conditions made easy