



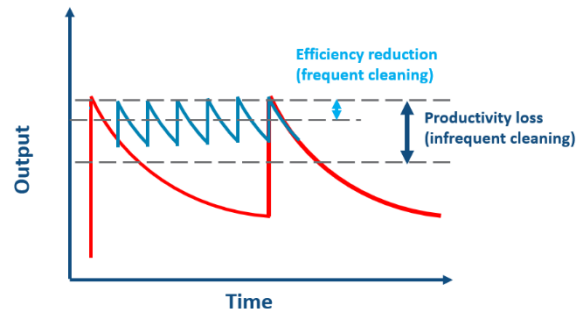
A20/A40 Aerobotic Autonomous Cleaner

- Superior air & brush cleaning removes 99% of fine dust
- Inexpensive air-powered propulsion
- Directly mounted on the solar panels without costly tracks or rails
- Engineered to clean PV panels for 10 years in harsh environments
- Costs 50-70% less than other solutions



The Challenge

The success of solar power as a source of renewable energy is driven by economics. Studies have conclusively shown that dirt, dust, and bird droppings can reduce PV electricity production by up to 40% or more. Without regular cleaning at an affordable cost, solar panels will not produce their promised quantities of electricity, nor will they be able to deliver a reasonable return on investment for their owners.



The Solution

Solaris Aerobotic™ Autonomous Cleaners use patent-pending air-powered technology for cleaning PV panels, avoiding the use of water that turns the fine, powder-like dust of desert environments into highly-adhesive mud. The Solaris Aerobotic Autonomous Cleaners use compressed air to propel the cleaner, rotate the latex cleaning brush, and remove the fine dust and loose dirt. Without the need for electrical motors or metal parts, the lightweight Solaris Aerobotic Cleaners can be installed directly on the PV panels without expensive supports and rails. They cost 50-70% less than other autonomous solutions, enabling affordable daily cleaning that maximizes your solar energy output.

Solaris cleaners are designed to clean PV panels for up to 10 years. They are produced through injection molding and engineered with plastic materials highly resistant to harsh environmental conditions, including Polyamide reinforced with glass fibers and treated for UV and hydrolytic stability. Also, smart operations such as a covered docking station, analytics for proactive maintenance, and optimized cleaning schedules maximize product longevity, cleaning effectiveness, and ROI.

How It Works

1. The patented air-powered motor propels the robotic cleaner across the PV panels.
2. The motor also rotates the cleaning brush, and jets air onto panels.
3. The cleaning brush loosens the dust, which is blown away by the air.
4. The robot is parked on the side and passes in the opposite direction on the next cleaning.



Specifications

	A20	A40
Cleaning area	20 m ² /min	40 m ² /min
Dirt removal	99%	99%
Brush module length	2 m (adjustable)	2 x 2 m
Brush type	Latex	Latex
Air pressure	70 psi	70 psi
Motor type	5-piston air motor	5-piston air motor
Incline range	0-60°	0-60°
Operating temperature	2-50 °C (32-122 °F)	2-50 °C (32-122 °F)
Size (L x H x W)	2670 x 325 x 435 mm	4750 x 325 x 435 mm
Weight	23.5 kg	39 kg
Emissions	Compressed air	Compressed air
Noise	<50 dB	<50 dB