SenseTronics

ST-9

Solar Panel Cleaning Robot

The JH-2 Intelligent Operation and Maintenance Robot is a smart cleaning device specifically designed for centralized solar photovoltaic power plants, integrating the functions of photovoltaic panel cleaning and inspection, aimed at improving the power generation efficiency of photovoltaic power stations, reducing maintenance costs, and ensuring the stable operation of the power plant.

Smart Inspection

High-Efficiency

Smart Connected

Obstacle Crossing

ST-9

KEY FEATURES

1

Dual-Roller + Suction

Dual-brush counter-rotation cleaning with enclosed dust suction - zero dust emission for single-pass high-efficiency cleaning.

2

Smart Inspection

Equipped with computing module, visible-light camera, and infrared camera, it uses AI technology to inspect PV panel faults during cleaning and automatically generate inspection reports.

3

Climbing & Obstacle Crossing

The mobile platform features four-wheel electric drive, enabling slope climbing and obstacle crossing under specific terrain conditions during full-load cleaning operations.

4

Smart Connected

The wireless field link enables real-time communication and control between the robot and backend platform, ensuring seamless data exchange during operation.

SPECS

ST-9 Robot

Max speed: ≥60m/min

Obstacle clearance: ≥10cm

Gradeability: ≥10°

Operation modes: Remote control / Autonomous

Cleaning capacity: ≥12,000m²/h

Cleaning efficiency: ≥95%

Operating temperature: -20°C to +60°C

Max endurance: ≥12h

Fault detection resolution: 10mm×10mm (Visible-light camera)

30mm×30mm (Infrared camera)

Adaptive adjustment range: JH-2S: Panel height 0.3-1.4m → Tilt angle 25°-41°

JH-2M: Panel height 0.1-0.55m → Tilt angle 33°-40°