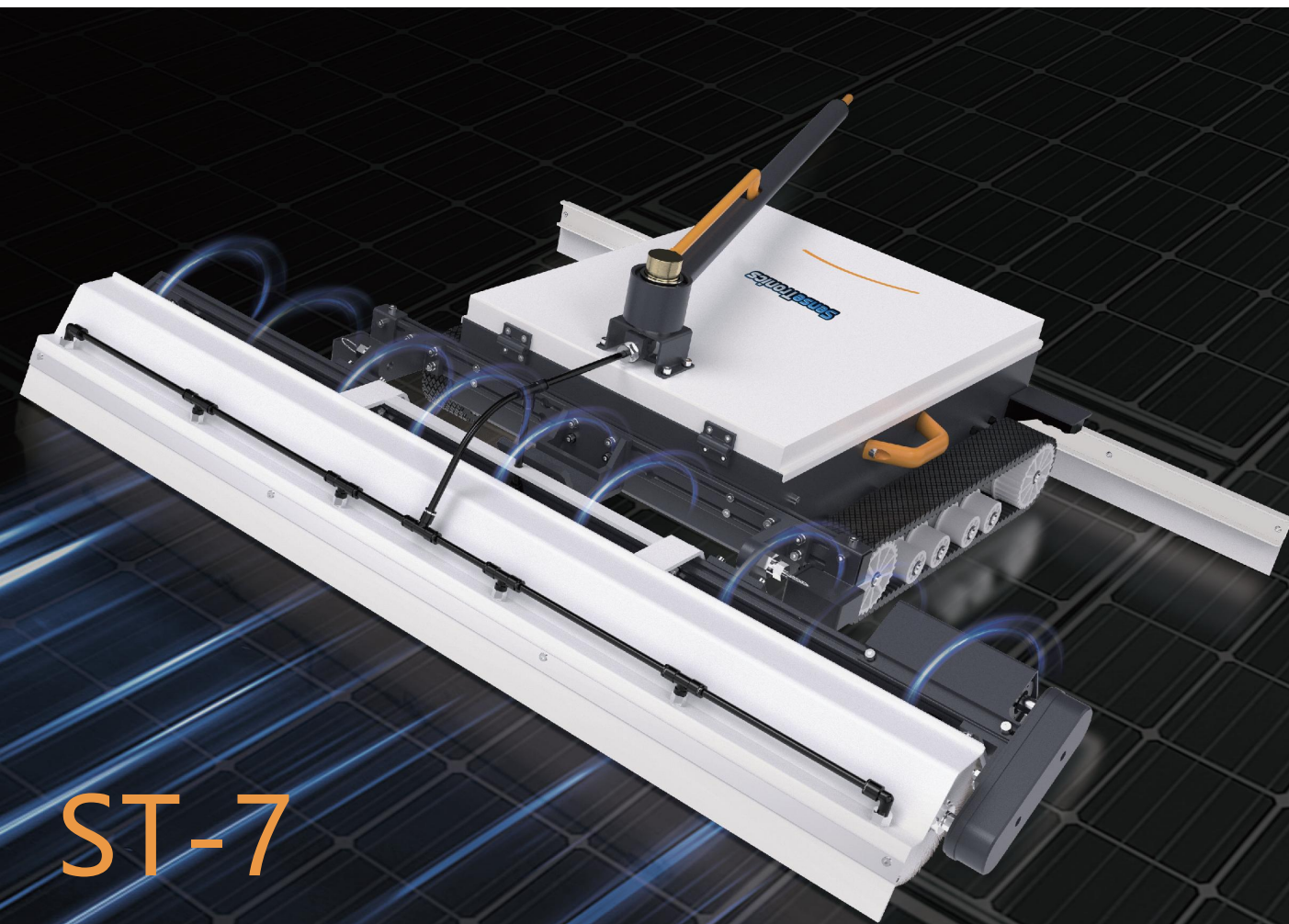




ST-7

Solar Panel Cleaning Robot

The ST-7 Remote-Controlled Tracked Solar Panel Cleaning Robot is a specialized cleaning device designed, developed, and manufactured for the unique environments of solar power plants. It specifically addresses areas inaccessible to humans or unsuitable for telescopic pole cleaning systems, enabling remote-controlled cleaning operations. Compared to traditional pole-based cleaning equipment, it offers higher efficiency and reduces labor costs.



Anti-Fall
Protection



High-
Efficiency



Lightweight
Design



Obstacle
Crossing

ST-7



KEY FEATURES

①

Automatic Correction

In the event of unexpected slippage during operation or cleaning route deviation caused by external forces, the vehicle can intelligently correct its position within seconds and maintain its cleaning path.

③

Significantly increased travel speed

Maximum 40 meters per minute, adjustable to 30 or 20 meters per minute, enabling deep cleaning for severely soiled solar panels (e.g., bird droppings); enhances cleaning efficiency for light dust accumulation.

Note: Limited to ST-7 and higher models.

②

Automatic Path Planning for Easier Operation (Optional)

Utilizing intelligent path planning, it achieves efficient bow-shaped cleaning with over 99% coverage, cleaning an average of 12,000 square meters daily, significantly reducing labor and operational costs.

④

Innovative Design Auto-Retract to Edge Power-Off Auto-Lock

The fall prevention system features four high-precision sensors at both ends. When approaching the edge of the solar panel, it automatically stops and retracts to a safe zone to prevent falls. In the event of unexpected power loss, the motor lock function activates within 0.5 seconds to prevent slippage and guard against equipment falling. (Note: A tilt angle of 15-20° for photovoltaic panels is considered hazardous. Safety ropes must be used to secure the panels and prevent the risk of falling.)

SPECS



ST-7 Robot

Cleaning width: 1350mm

Travel speed: 20/30/40(Max) m/min (±2m)

Battery life: Standard 4-5h / Long-Range 8-10h

Charging time: 8h

External Dimensions: 1450*1150*350

Body weight: 51KG

Brush head weight: 10.5KG

Battery weight: 8KG

Horizontal Crossing Capability: 25cm

Lithium Battery Specifications: 48V/30Ah

Drive motor: 40W*2

Brush motor: 150W

Landing speed: 230-250r/min

Cleaning Type: Wet Cleaning

Protection Rating: IP65

Operating Temperature Range: -20-50°C

Recommended tilt angles for photovoltaic panels: Low speed: 20° Medium speed: 15° High speed: 10°

Vehicle Materials: Aluminum alloy, stainless steel, rubber, plastic (PA, PP, etc.)



Remote control

Battery life: 30h

Charging time: 6-8h

Compatible charging voltage range: 5V/1A

Charging port type: TP-C

Configuration

	 说明书	 遥控器	 锂电池	 充电器	 工具包	 锂电池背包
Standard	×1	×1	×1	×1	×1	×1
Long-Range	×1	×1	×2	×2	×1	×2