

ST-6

Solar Panel Cleaning Robot

The ST-6 remote-controlled suspended solar panel cleaner features an overhead gliding design that moves rapidly across solar panels, adapting to varied terrains with up to 50° inclination (including mountains, deserts, elevated piles, and lakes).

Compared to conventional cleaning equipment, it delivers 76% higher cleaning efficiency with expanded coverage and superior pass-through capability, all operable via remote control — setting the benchmark for solar panel cleaning performance.

ST-6



General
Purpose



High-
Efficiency



High
Pass Rate



Bridge
Crossing

ST-6



KEY FEATURES

1

One ST-6 Fits All PV Sizes

The ST-6's patented modular design features a three-section structure (upper, middle, lower) with interchangeable mid-section kits for different solar panel sizes, cutting costs. Easy to replace in 20 minutes.

3

Remote-Calibrated | 98% Auto-Pass

The machine can actively correct its posture via remote control when encountering misaligned PV panels (up to 10mm offset), achieving a 98% pass rate - significantly higher than conventional products.



2

Terrain-Independent Photovoltaic Clean Energy Efficiency Ceiling

The product can be suspended for operation on photovoltaic modules, suitable for solar power plants with slopes up to 50 degrees. It enables sweeping motion cleaning, overcoming terrain limitations and boosting cleaning efficiency by over 76%. Applicable to mountainous, utility-scale, aquaculture-photovoltaic, and agro-photovoltaic power plant types.

4

Spanning wide gaps Supporting bridges Cleaning faster

When adjacent photovoltaic arrays are spaced widely apart and arranged relatively neatly, the product features two sets of extendable bridging brackets. This eliminates the need for frequent relocation, significantly boosting cleaning efficiency.

(The default standard configuration accommodates gaps up to 60cm; wider spans are available upon request.)

SPECS



MODEL	PV SIZE(MM)	BRUSH SIZE(MM)	NET WEIGHT(KG)
ST-601	1640-1650	1640	40
ST-602	1990-2000	2000	45
ST-603	2268-2278	2278	50
ST-604	2370-2384	2384	55
ST-605	3310-3320	1640*2	60
ST-606	4010-4020	2000*2	65
ST-607	4566-4576	2278*2	70
ST-608	4768-4788	2384*2	75
Customized	Customized	Customized	-

ST-6
Robot

Power: Lithium battery
Voltage/Capacity: 48V 20Ah
Battery weight: 6.5kg/unit
Runtime: 6-8h
Charging time: 7-8h
Operating temperature: -20 to 60°C

Travel speed: ≤15 m/min
Remote range: 100 m
Landing speed: 230-250 r/min
Brush speed: 300 r/min
Brush motor: 400 W
Drive motors: 200 W * 2
Cleaning type: Dry/Wet
Working angle: ≤50°
Surface offset: ≤40mm
Lateral span: ≤600mm
(with bridge kit)
Vertical misalignment: ≤30mm

Configuration



Telescopic arm
60cm bridge kit

×2



Remote control

×1



Lithium Battery

×2



Charger

×2



Tool Kit

×1



Backpack

×2