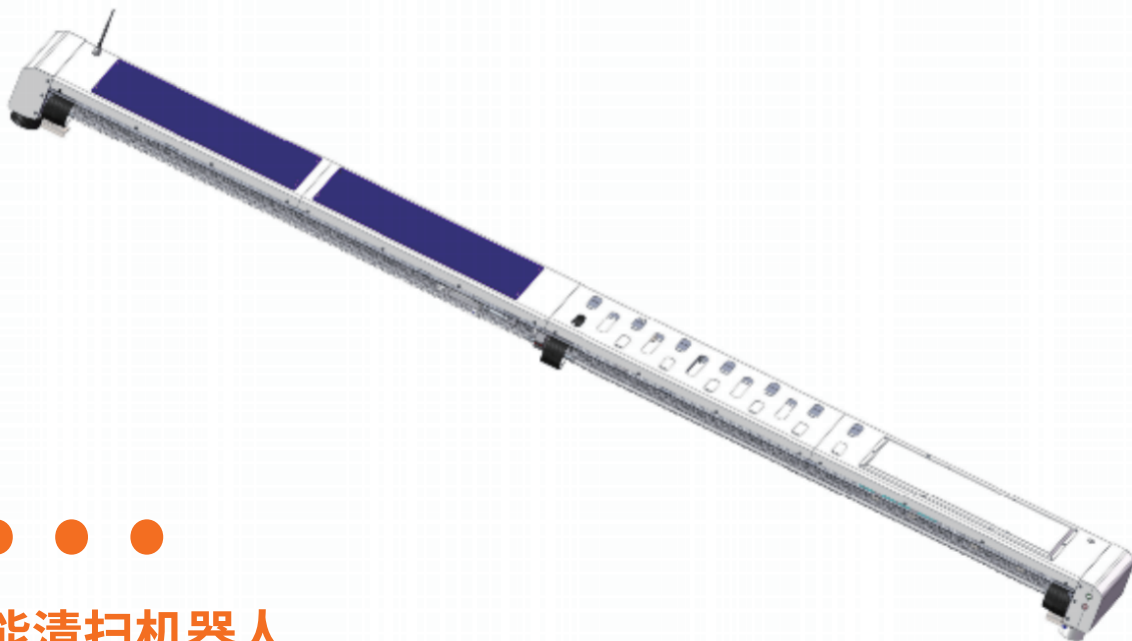




光伏智能清扫机器人

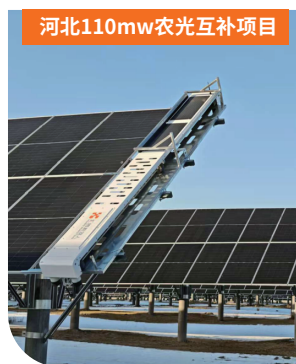
产品优势

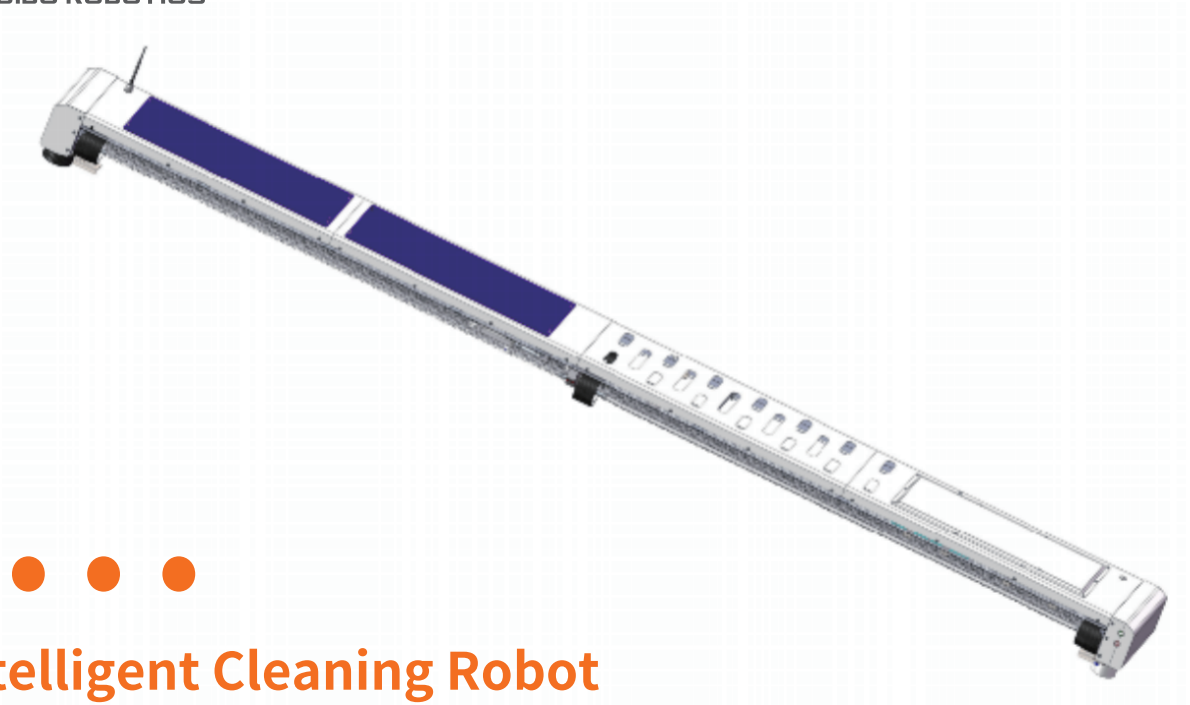
- 
 环境和地形适应能力强，可实现光伏面板前后、上下错位50mm的跨越
- 
 全自动化量产技术保障清洁机器人制造一致性及可靠性
- 
 具有跨行清扫、自供电、轻量化、模块化、智能跨障、自主操作系统等6大核心关键技术
- 
 具有自我检测和诊断功能，保障机器人长期稳定运行

技术参数

产品类型		地面型/屋面型
名称	单位	参数值
适应组件长度	mm	1650~9000
爬坡能力	°	25
越障能力-组件平面错位	mm	50
越障能力-组件边框错位	mm	50
行走功率	W	120~400
行走速度	m/min	10~13
清洁效率	%	95%
单次行走距离	mm	-
自充电光伏板功率	W	60~240
充电器类型	MPPT	MPPT
电池类型	/	磷酸铁锂电池
标称电压	V	24
标称容量	AH	15~30AH(Option)
机器自重	kg	50~135
机器宽度	mm	405
机器高度 (不含防坠钩及天线)	mm	310
运行温度	°C	-20~60
防护等级	/	IP65
物联网通信技术	/	LORA
电机类型	/	无刷电机
电机使用寿命	H	>10000
自动报警	/	有
自动校准归位功能	s	<15

项目案例





PV Intelligent Cleaning Robot

PV Panel Cleaning Robot



This product is a specialized automated cleaning robot designed for solar PV (PV) panels. Its key features include: motion control, heading angle detection, attitude control, wireless communication, big data integration, weather-linked operation, and a dust warning system. Utilizing LoRa IoT communication technology, the robot can transmit data via the internet and be remotely managed through its operating system. Additionally, the robot employs waterless cleaning technology, conserving water resources while effectively cleaning solar panels to enhance energy utilization efficiency.

Basic Specifications

Parameter	Unit	Value
Robot Model	mm	1650~9000
Continuous Climbing Ability	°	25
Obstacle Clearance Ability (Vertical Height Difference)	mm	50
Obstacle Clearance Ability (Horizontal Length Difference)	mm	50
Walking Power	W	120-360
Walking Speed	m/min	10~13
Single-Charge Walking Distance	m	-
Self-Charging Solar Panel Power	W	60~240
Charger Type	MPPT	MPPT
Battery Type	/	Ternary Lithium Battery / LiFePO4
Nominal Voltage	V	24
Nominal Capacity	AH	15-30Ah(Optional)
Robot Weight	kg	50-135KG
Robot Width	mm	405
Robot Height	mm	310
Operating Temperature	°C	-30-60
Protection Rating	/	IP65
Communication and Monitoring	/	LORA
Motor Type	/	Brushless Motor
Motor Service Life	H	>10000
Automatic Alarms	/	YES
Auto Calibration & Return	s	15

