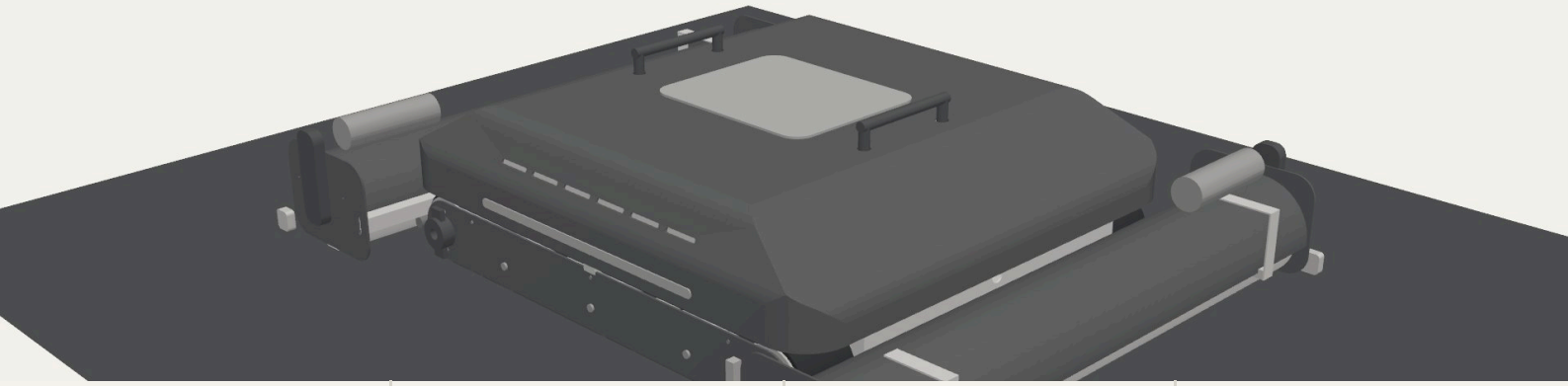
ROBOTRONICS L.L.C

DATASHEET · 2026

RoboTronics V2.0

AI-assisted cleaning robot

IN DEVELOPMENT · LAUNCHING SOON



8 h	100 m²/h	90%	IP67
Battery life	Cleaning speed	Water recycling	Waterproof rating

Overview

Our next-generation robot combines AI-assisted automated cleaning with a rugged, waterproof design optimized specifically for desert and harsh environmental conditions.

Key features

- AI-assisted automated cleaning for greater efficiency and accuracy
- Enhanced safety system to prevent panel damage and operator hazards
- Rugged, waterproof design optimized for desert environments
- Improved remote control system with greater operational range

Specifications

Cleaning	AI-assisted automated cleaning
Water recycling	90% efficiency
Battery life	8 hours
Cleaning speed	100 m²/hour
Waterproof rating	IP67
Remote monitoring	Yes, with performance analytics
Best for	Commercial & industrial installations
Availability	In development, launching soon
Price	Contact us for a quote

Flexible ways to work with RoboTronics.

Cleaning-as-a-Service

Scheduled robotic cleaning for industrial and commercial solar farms: keep panels at peak performance without owning the hardware.

Annual maintenance packages

Comprehensive servicing, updates and priority technical support to keep your robots operating at their best.

Customized hardware solutions

Tailored robotic cleaning hardware engineered for your site's specific panels, layout and environment.

Technical specifications

SENSING	
High-resolution cameras	4K resolution with a 120° field of view for comprehensive surface analysis
Infrared sensors	Precision edge detection with 2 mm accuracy for safe navigation
Dirt detection	AI-powered analysis identifies dirt concentration and type for optimized cleaning
Ultrasonic proximity	360° obstacle detection from 10 cm to 5 m
CLEANING	
Microfiber brushes	Soft-touch brushes with variable pressure control (0.1–2.0 kg/cm²)
Water delivery	Precision nozzles with adjustable flow rate (0–200 ml/min)
Filtration	Three-stage filtration with a 5-micron final filter for water recycling
Drying	Microfiber squeegee with optional air-assist for streak-free results
POWER	
Battery	Lithium-ion pack (48 V, 40 Ah) with smart BMS
Operating time	6–8 hours continuous operation per charge
Charging time	3 hours to 80%, 4.5 hours to 100%
Motors	Brushless DC motors with 95% efficiency
CONNECTIVITY	
Remote control range	Up to 100 m line of sight, unlimited via cloud connection
Control interface	Mobile app (iOS/Android), web dashboard, optional physical remote
Data collection	Real-time performance metrics, cleaning history, panel condition

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