



ALPHAROBOTICS SOLUTIONS
SMART TECH. HUMAN TOUCH

AlphaRobotics S5

Autonomous Sweeper

Clean From Fine Dust to Industrial Debris

SWEEP

VACUUM



Industrial

Retail

Parking
Garage

Transportation
Hubs

Warehousing

Heavy-duty autonomous sweeping — from fine dust to industrial debris, indoors and out.



Operational Overview & Applications

The AlphaRobotics S5 is a high-capacity autonomous sweeper engineered for industrial-grade debris. With an 820 mm sweeping width, a 50 L debris hopper and up to 2,500 m²/h of productivity, it powers through warehouses, parking garages and transportation hubs — and returns to its charging station on its own.



27,000 ft²/hr

Max. theoretical
productivity (~2,500
m²/h)

5–7 hours

Runtime per charge

2 hours

Fast charging

Ideal Environments

Industrial

Retail

Parking
Garage

Transportation
Hubs

Warehousing

Core Operating Value

Industrial-grade sweeping

Cleans everything from fine dust to industrial debris with an 820 mm / 32.3 in sweeping width and 50 L hopper.

Spot cleaning — 4× faster

Intelligent spot cleaning lifts efficiency by as much as a factor of four compared with manual follow-up.

TeamClean coordination

Works in coordination with AlphaRobotics scrubber dryers for complete floor-care coverage.



Key Technology Features

Autonomous-driving intelligence applied to industrial sweeping.

NVIDIA AI Computing Chip — 100 TOPS

An Nvidia AI computing chip with 100 TOPS of AI performance powers fast, reliable autonomous decisions.

32-Beam 3D LiDAR — 150 m / 492 ft

Core environmental sensor with 150 m / 492 ft detection range for precise localization and avoidance.

Vehicle Recognition

Recognizes vehicles in parking garages and traffic environments for safe, smart navigation.

HEPA Filtration + Auto Filter Shaker

HEPA-grade filtration with an automatic filter shaker keeps airflow strong and maintenance low.

Quick-Release Brushes & Hopper

Quick-release side brushes and debris hopper make daily service fast and tool-free.

Auto Charging-Station Return

Returns to its charging station automatically; fits through 32 in doorways for true facility-wide coverage.





Safety Systems & Maintenance

Autonomous-driving safety technology with tool-free daily service.

Long-Range Perception

32-beam 3D LiDAR with 150 m / 492 ft range, combined with 100 TOPS AI computing, delivers autonomous-driving-grade safety.

Vehicle Recognition

Identifies and safely navigates around vehicles in parking garages and mixed-traffic environments.

HEPA + Auto Filter Shaker

HEPA filtration captures fine dust; the automatic filter shaker maintains suction and reduces service intervals.

Tool-Free Daily Service

Quick-release side brushes and a quick-release 50 L hopper keep routine maintenance fast and simple.





Complete Specification Matrix

Manufacturer specifications preserved in dual units — imperial and metric.

PARAMETER	TECHNICAL VALUE
BASIC INFORMATION	
Length	40.6 in 1,030 mm
Width (without side brush)	28.3 in 720 mm
Height	39 in 990 mm
Weight	287 lb 130 kg
Sweeping Width	32.3 in 820 mm
CLEANING	
Cleaning Productivity	~27,000 ft ² /h (~2,500 m ² /h)
Debris Hopper Capacity	13.2 gal 50 L
MOVEMENT	
Max. Speed	3.13 mph 1.4 m/s
Min. Distance from Wall	0 in 0 cm
Min. Passable Width	32 in 810 mm
Max. Climb Angle	8°
POWER	
Battery Type	LFP
Battery Capacity	75 Ah
Charging Time	2 hrs
Runtime	5–7 hrs
KEY COMPONENTS	
Computing Platform	Nvidia AI computing chip (with 100 TOPS AI performance)
Core Environmental Sensor	32-beam 3D LiDAR (492 ft / 150 m)

Note: Technical values preserved from the manufacturer brochure. Performance data may vary by application environment.



ALPHAROBOTICS SOLUTIONS
SMART TECH. HUMAN TOUCH

AlphaRobotics S5

The Reliable, Hassle-free Robots You Can Trust



Leading the New Era of Cleaning Robotics

AlphaRobotics Solutions LLC

www.AlphaRoboticsAi.com

Info@AlphaRoboticsAi.com

(818) 659-8338

Smart Tech. Human Touch.