

Hypertron-SW01

Agile Intelligence.
Anywhere Mobility.



Hypertron-SW01 is a versatile mid-sized wheel-legged robot from Astrall Dynamics. Equipped with proprietary high-torque and high-precision joint modules, it balances excellent payload and long battery life. Boasting great agility and strong terrain adaptability, it applies to security patrol, logistics delivery, surveying and industrial inspection. It supports autonomous operation and modular expansion, enabling cost-effective automation of repetitive and hazardous tasks to reduce costs, improve efficiency and drive intelligent upgrading.

120kg

Max Payload

50kg

Continuous Payload

6h

Runtime

IP67

IP Rating



Auto
Obstacle
Avoidance



Auto
Navigation



Auto
Charging
(Optional)



AI-enabled
Adaptation

Application Scenarios



Power & Energy
Infrastructure



Firefighting &
Emergency Rescue



Security & Safety



Industrial Park &
Warehouse



Petrochemical Industry



Utility tunnel



Mine Industry & Railway



Hydraulic
Engineering

Technical Parameters

General Specifications	Dimensions (L × W × H)	930.5mm*524mm*656mm (L*W*H)
	Weight	47kg
	Degree of Freedom	16
Performance	Max Speed	8m/s (1)
	Max Slope Capability	45°
	Max Stair Height	25cm
	Max Obstacle Clearance	100cm (2)
	Runtime (No-load)	6h hours
	All-terrain payload	40kg
	Continuous Walking Payload (Flat Ground)	50kg
	Max Static Payload	120kg
	Max Torque	180N·m
	Wheel Size	8 inches
Sensors & Modules	Sensor Suite	9-axis IMU (3-axis accelerometer + 3-axis gyroscope + 3-axis magnetometer)
	LiDAR	1 unit (FOV: 120° H × 90° V, 10–15 FPS)
	Smart Controller	Up to 15 km transmission range, 2 km ground control range
	Wide-angle Camera	1080P, 120° ultra-wide-angle camera
	Optional Modules	Microphone, speaker, dual-spectrum gimbal, robotic arm etc..
	Computing System	Built-in industrial-grade octa-core processor (16GB RAM + 64GB storage)
	Charging System	External charger (Standard) Automatic contact charging dock (Optional)
Environmental	Ingress Protection	IP67
	Operating Temperature	-20°C - 55°C

[1]、[2]: realized in special configurations, in practice there is a speed and height limit for security purposes