

Assistive Robotic Guide Dog

Intelligent mobility support for visually impaired and blind users.

More responsive

Smarter guidance. Safer travel.



≥ 1.5 h

operating time

≤ 1 h

charging time

IP54

protection rating

11.5 kg

compact body weight

Core capabilities

1 Obstacle avoidance

Detects static and dynamic obstacles in advance, with avoidance, warning and stop behavior.

2 Navigation & mapping

Autonomous mapping, path planning and centimeter-level positioning for confident travel.

3 All-terrain mobility

Handles paved roads, stairs, grass, cobblestone paths, tactile paving and marble.

4 Voice & emergency help

Voice interaction, real-time status feedback, one-touch emergency assistance and alerting.

Designed for safer everyday mobility

Homes, offices, shopping malls, parks, subways, buses, pedestrian areas, stairs, access gates and traffic-light crossings.

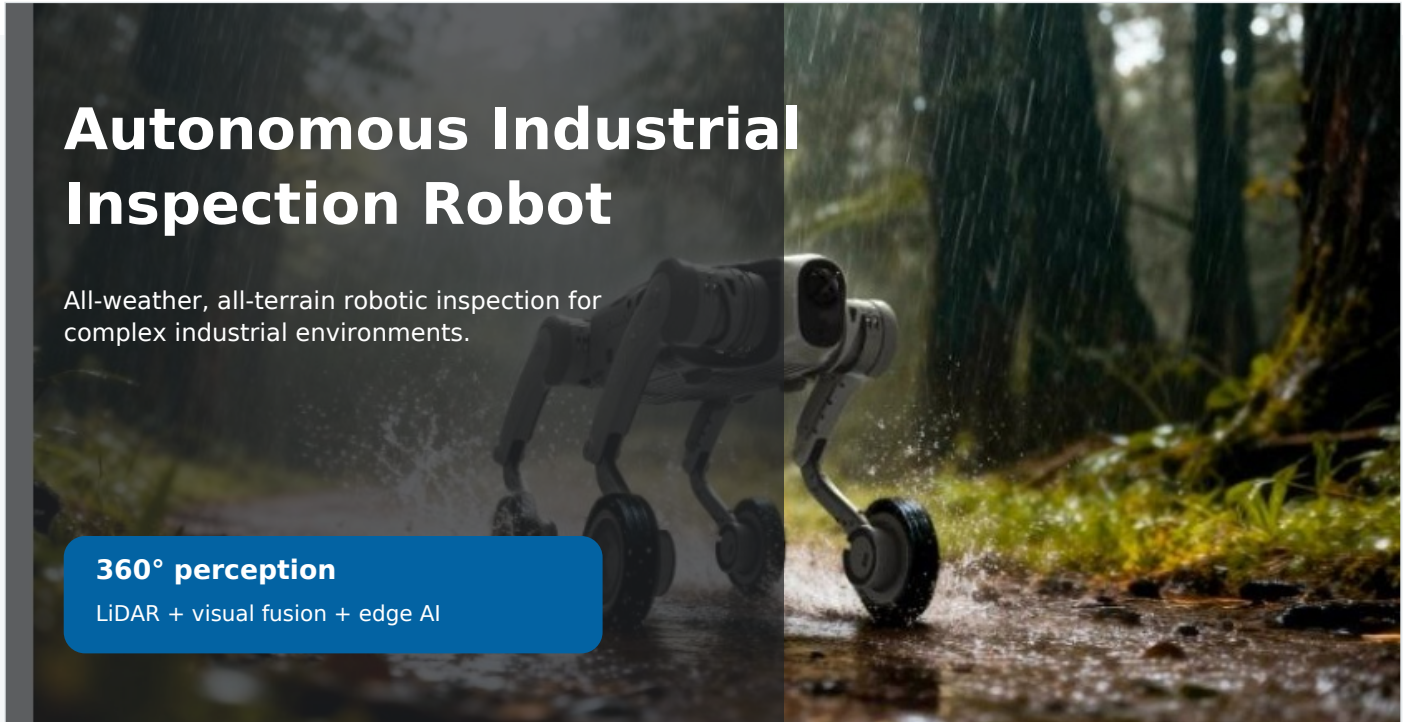
Ideal for pilot deployments with user training, safety validation and route mapping.

Autonomous Industrial Inspection Robot

All-weather, all-terrain robotic inspection for complex industrial environments.

360° perception

LiDAR + visual fusion + edge AI



IP67

dust and water protection

275 TOPS

edge compute power

20-30 kg

continuous payload

-20 to 55°C

operating temperature

Built for critical inspection workflows

1 Autonomous patrol

Maps and navigates large facilities, manages routes and returns to charge as part of automated workflows.

2 Precise perception

Dual 96-line LiDAR and four fisheye cameras deliver 360° environmental awareness.

3 All-terrain mobility

Wheel-leg mobility reaches up to 5 m/s and handles slopes, steps, gravel and uneven terrain.

4 Remote visibility

Live video, thermal sensing and anomaly alerts support safer inspection decisions.

Ideal environments

Factories, power stations, logistics hubs, parking structures, industrial campuses, tunnels and high-coverage perimeter routes.



Autonomous patrol



Thermal diagnostics

Assistive Robotic Guide Dog

Assistive mobility version for visually impaired and blind users

Product overview

A compact quadruped mobility-assistance robot designed to support safer, more independent navigation through precise perception, autonomous path planning, voice interaction and emergency assistance.



Centimeter

positioning

Static + dynamic

obstacle avoidance

Voice

commands

Emergency

assistance

Core technical specifications

Operating time	≥ 1.5 h
Charging time	≤ 1 h
Protection rating	IP54
Dimensions standing	730 x 370 x 525 mm
Weight	11.5 kg
Battery capacity	4.6 Ah / 98.72 Wh
Auto charging	Supported
Guided motion speed	Up to 0.5 m/s in assistive navigation mode
Max slope angle	≥ 30 deg
Stair climbing height	≥ 16 cm
Communication	4G / Wi-Fi
Audio module	Speaker, wireless Bluetooth earphones and wireless microphone

Navigation, safety and interaction

Positioning accuracy	Centimeter-level
Perception sensors	3D LiDAR, depth camera, ultrasonic sensors, RGB camera and force sensors
Obstacle detection	Static and dynamic obstacle detection with avoidance, warning and stop behavior
Environmental mapping	Community maps with safe routes and key waypoints
Path planning	Preloaded maps plus real-time perception for route planning and autonomous guidance
Traffic light recognition	Supported
Voice command control	Semantic voice interaction and command execution
Guide cane	Adjustable height, vibration feedback and one-touch alarm
Terrain adaptability	Paved roads, stairs, grass, cobblestone paths, tactile paving and marble
Emergency alert	Uploads status and location to backend, sends alerts and triggers audio-visual warnings

Deployment note

Final configuration, route mapping, user training, safety validation and local accessibility requirements should be confirmed before public deployment.

Autonomous Industrial Inspection Robot

All-weather, all-terrain inspection version for industrial sites

Product overview

An industry-grade autonomous quadruped inspection robot combining high-performance edge computing, 360° multimodal perception, IP67 protection and wheel-leg mobility for routine patrols, equipment monitoring and mission logistics.



Dual 96-line

LiDAR

4 fisheye

cameras

1000 Wh

battery

IP67

all-weather

Core platform specifications

Version modes	Point-foot for unstructured terrain; wheeled-foot for high-speed structured spaces
Dimensions standing	900 x 543 x 572 mm
Weight with battery	61 kg point-foot / 62 kg wheeled-foot
Computing platform	NVIDIA Jetson Orin AGX 64G + RK3588
Compute performance	275 TOPS total computing power
Perception sensors	Dual 3D LiDAR + four fisheye cameras
LiDAR configuration	Dual 96-line LiDAR standard; dual 192-line upgrade available upon request
Maximum joint torque	165 Nm
Battery capacity	1000 Wh
Operating time	2-2.5 h point-foot / 2-3 h wheeled-foot
Continuous payload	20-30 kg
Single-charge range	Up to 14 km depending on configuration and environment

Mobility, environment and deployment

Maximum speed	Up to 5 m/s in wheeled-foot configuration
Maximum step height	30 cm point-foot / 25 cm wheeled-foot
Climbing capability	Up to 80 cm obstacle capability
Slope capability	25 deg ascent / 45 deg descent point-foot; 30 deg ascent / 45 deg descent wheeled-foot
Operating temperature	-20°C to 55°C
Cold-start capability	Below -10°C
Ingress protection	IP67
Autonomous navigation	Supported
Connectivity	4G + Wi-Fi 6 + Bluetooth
Interaction	Voice interaction and autonomous following supported
Optional accessories	Charging station, delivery box up to 30 kg and dual-spectrum inspection gimbal
Primary applications	Industrial inspection, power stations, campuses, logistics hubs, security patrol and equipment monitoring

Specification note

Performance data is based on supplied laboratory/product material. Actual results vary by environment, payload, configuration, terrain and deployment conditions.