



Fire & Rescue **RESPONSE**



A photograph of two firefighters in full protective gear, including helmets and oxygen tanks. They are positioned in front of a large fire, with one firefighter holding a hose. The scene is filled with bright orange flames and thick black smoke, creating a high-contrast, dramatic environment.

01 Fire

Rapid frontline support

Real-time imaging in smoke and heat. Robots identify hotspots, locate people, and guide response teams. When fitted with water cannons, they deliver direct fire suppression, extending reach and impact while reducing firefighter risk.

A photograph showing the interior of a severely damaged building. The structure is in a state of collapse, with twisted metal beams, debris, and rubble visible. The lighting is dim, highlighting the extent of the destruction.

02 Disaster

Safer search operations

Robots enter collapsed buildings and unstable zones. They provide real-time visuals, detect survivors, and assess structural safety. Sensors relay vital data to crews, speeding rescue efforts and keeping people safe during critical operations.

A photograph of a vast, open landscape that has been completely scorched by a wildfire. The ground is covered in dark, charred vegetation and ash, with a few small, dry bushes scattered across the terrain. The sky is a clear, pale blue.

03 Mountain

All-terrain mobility

Designed for rugged landscapes, robots navigate slopes and uneven ground with ease. They extend rescue reach, carrying sensors and cameras to scan remote areas, helping locate missing people and deliver rescue equipment.

A photograph showing thick, billowing clouds of white and light blue smoke or vapor against a dark background. The smoke has a wispy, ethereal quality, suggesting a hazardous chemical release.

04 Chemical

Hazard detection

Robotic dogs enter contaminated zones using advanced sensors to detect leaks, monitor toxic levels, and relay data to crews. They help responders act quickly and safely while reducing exposure during hazardous material incidents.

Detection Model

Weight	Approx 90 kg
Payload Capacity	Approx 25 kg
Max Speed	3.5 m/s
Battery Life	Range: > 15 km Runtime: > 3.6 hours Power consumption may vary depending on configuration
Protection Rating	IP66
Removable Battery	Yes
Material	Composite-metal body with high strength, wear resistance and fireproof properties
Rollover Function	Manual remote-controlled recovery with one touch rollover
Communication	Ad hoc Mesh Network with relay expansion support
Software Management Platform	Proprietary human robot interaction system



The equipment



360° Camera & 3D Laser Scanner
Clear video and mapping in bright/low light with real-time streaming



Gas Detection Sensor
Monitors CO, CO₂, O₂, NOx, H₂S, flammable gases; real-time alerts



Handheld Remote Control Terminal
Sunlight-readable display



Dual-Optical PTZ System
Detects heat sources and temperature of people & environment



Rapid-Deployment Case
Portable case for fast setup

All terrain operation



Stairs



Slopes



Obstacles

Water Cannon Model

Max Speed	2.5 m/s	
Wading Depth	1 m	
Step Climbing	> 25 cm	
Water Cannon Performance	Adjustable Flow Rate: 20L/s, 30L/s, 40L/s (3 selectable levels)	
Spray Modes	Straight & Foggy	
Max Range	60 m	
Max Spray Angle	120°	
Horizontal Movement	±20°	
Pitch Angle	5°~85° (with body compensation)	
Water Intake System	Inlet Pipe Options: DN65/DN80 Remote Hose Release: Enabled	
Operator Terminal	Display: Sunlight-readable, supports multi-channel signal display	
Communication	Ad hoc Mesh Network with relay expansion support	
Auxiliary Functions	Self-Cooling System: High-temperature resistant Dual-Optical Smoke-Penetrating Camera	



Foam nozzle
Suppress fires and prevent spreading



Dual-optic camera
Suppress fires and prevent spreading



Gas Detection Sensor
Monitors CO, CO₂, O₂, NOx, H₂S, flammable gases; real-time alerts



Handheld Remote Control Terminal
Sunlight-readable display



Hose Carriage System



Rocks & gravel



Grass & foliage



Buildings & ruins

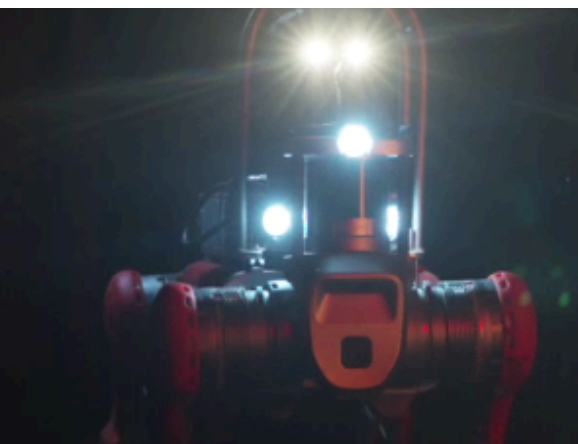


Remote Monitoring

Provides live video and sensor data so crews can see and assess dangerous areas from a safe distance.

Fire Suppression

Carries and operates fire suppression equipment to target fires directly at the source.



Navigating

Moves through smoke filled or unstable environments where people and vehicles cannot safely enter.

Decision Making

Analyses data on heat, structure and environment to support fast and accurate choices in critical situations.

Remote management platform





When every second counts

Foresight for the frontline

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