



QUADRUPED ROBOT FIRE AND RESCUE SOLUTION

Lead with Intelligence. Smart Tools,
Smarter Response.



PRODUCT PARAMETERS



Weight	80kg
Load	30kg
Max. Speed	5m/s
Endurance	The cruising range exceeds 15km. The cruising time exceeds 3.6 hours.
Ingress Protection	IP66
Interface	Ad-hoc network, supporting relay expansion.
Removable Battery	Yes
Material	Full composite metal body which is wear-resistant, high mechanical strength, and fire-resistant.
Fall-down Adjustment	Equipped with a one click button of self-righting function
Software Management	Platform Equipped with a self-developed UI system

All-terrain Operation

Easily pass 40cm obstacles with stairs, 40° slopes. Freely move on non-structured roads such as ruins, rock piles, and gravel grass. Its advantages of omnidirectional movement and small contact surface avoid changing the site environment and reduce the probability of secondary accidents.

* Please note that power consumption may vary based on selected options.

360 Panoramic Camera



Transmit live images in real-time and obtain clear videos even in bright environments and low-light conditions.

Bi-Spectrum PTZ



Obtain temperature distribution of personnel and the environment by penetrating smoke obstructions and tracking heat sources. Two-way voice intercom for clear communication.

Gas Sensor



Automatically identify and detect flammable and harmful gases such as CO, CO2, O2, combustible gases, nitrogen oxides, hydrogen sulfide, etc, and provide real-time concentration alarms.

Ad-hoc Network



A powerful tool for achieving network coverage in complex environments. A dual network mode that addresses issues with signal interference.

Handheld Remote Control



Equipped with a large high-definition screen, suitable for outdoor use even under strong sunlight. Allows access for on-site command.



3D Laser Scanner



Mechanical Arm for Firefighting



Quick-release High-pressure Tank Fire Extinguisher



Quick-release Carrying Case

APPLICABLE SCENARIOS



01

Fire Rescue

Navigates smoke-filled, confined spaces, gathers data, and assists in fire suppression in diverse and challenging environments.



02

Disaster Response

Rapidly explores unstable, debris-filled environments, creating 3D models and inspecting structural integrity to support safe rescue and recovery efforts.



Fire Rescue

03

Mountain Rescue

Interprets and navigates complex harsh environments to reach and assist individuals in hard-to-access areas.

04

Chemical Hazard Response

Deploys into front line areas to assess toxic gas levels, ensuring the safety of rescue teams.



CERTIFICATIONS CREDENTIALS

Global Leadership in Quadruped Robotics

NextGen Ri are an approved supplier of Unitree robotic technology. Unitree has consistently set the standard for innovation and excellence in quadruped robot technology. Their commitment to advancing robotics is reflected in numerous certifications and industry-first achievements.

Pioneers in Disaster Relief

Unitree was the first to deploy quadruped robots in national earthquake relief and other critical drills, showcasing a dedication to real-world, life-saving technology.

Industry Leading Integration

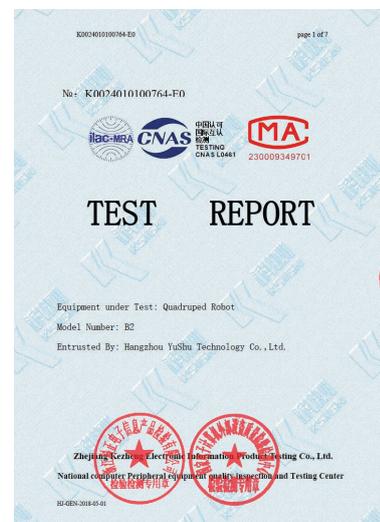
Unitree's unmatched integration capabilities within the quadruped robot industry ensure seamless functionality across diverse sectors.

Academic Influence

Unitree's significant contributions to the world's top robotics academia have established them as a thought leader and innovator in the field.

First IP68 Certified Quadruped Robot Company

In 2001, Unitree became the world's first quadruped robot company to achieve IP68 certification, demonstrating their durability, reliability, and performance in the toughest conditions.



REAL USER SAMPLE CASE

USE CASE

01



Fire and Rescue

In fire and rescue, every second counts. The quadruped robot solution by leading brand Unitree, allows operation in hazardous environments without risking lives. Engineered to assist and protect crews by investigating dangerous areas, carrying essential equipment, and aiding in fire suppression, this advanced support system significantly improves safety and efficiency.

Remote Monitoring

With advanced cameras, sensors, and thermal imaging, the quadruped robots can provide real-time data and visual feeds. Firefighting teams can remotely assess situations, identify hot spots, check structural integrity, and detect hazardous materials from a safe distance.

Fire Suppression

The robots can operate specialised firefighting tools in hard-to-reach areas, ensuring effective fire suppression even in the toughest conditions. This ensures no area is overlooked, providing a thorough and effective response to emergencies.

USE CASE

02



Disaster Response

The ability to complete tasks under extreme conditions such as high temperatures, toxic smoke, limited visibility and collapsed structures, can be compromised without the right equipment. Equipped with advanced imaging and 3D modelling capabilities, the quadruped robot can identify ignition points, detect harmful gases and see structural vulnerabilities, significantly enhancing the effectiveness of incident response and investigation.

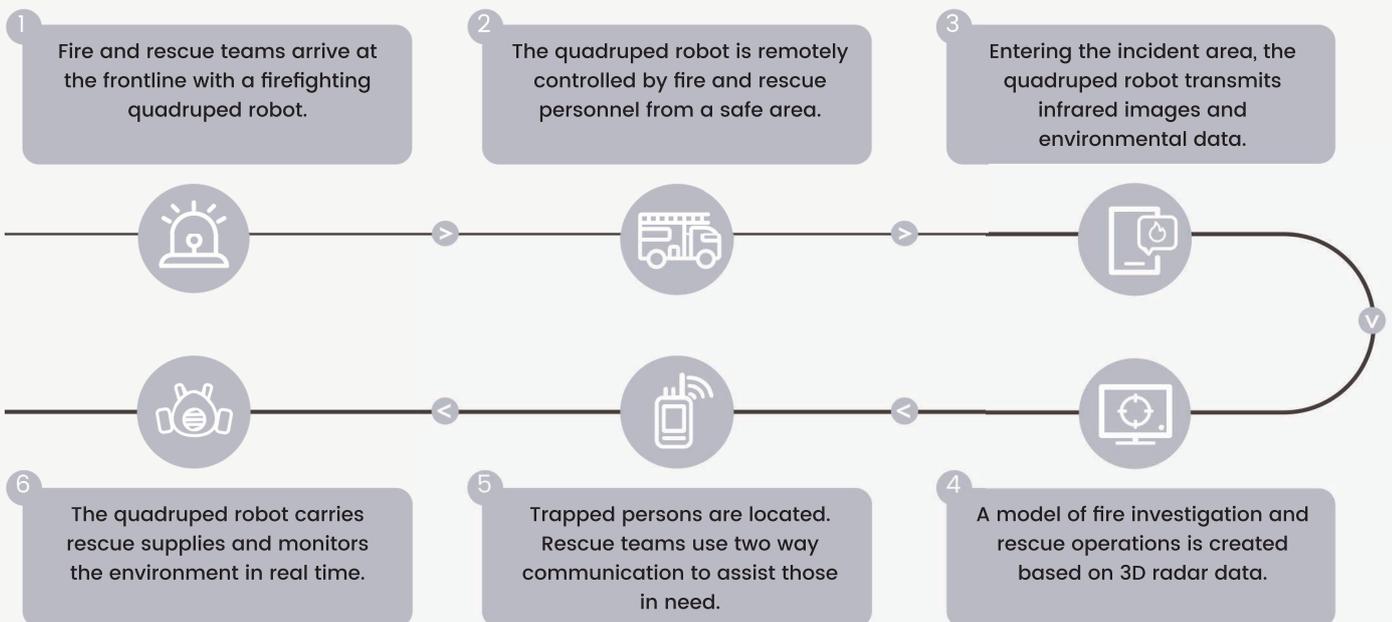
Improved Safety and Decision Making

By deploying the robot, rescue teams can safely gather accurate data in hazardous environments. This technology not only ensures the safety of personnel but also enables on-site commanders to make timely, informed decisions based on real-time feedback, leading to more effective and precise disaster response strategies.

MANAGEMENT PLATFORM



SMART FIRE RESCUE PROCESS



INTELLIGENT PATROL

NextGen Robotics and Innovation

Contact us

 0115 989 2760

 hello@nextgenri.co.uk

 www.nextgenri.co.uk

 Unit 13 Manvers Business Park,
High Hazles Road, Cotgrave,
Nottingham, NG12 3GZ