

PRODUCT INTRODUCTION

The lifting smoke exhaust fire extinguishing robot is an intelligent multifunctional fire robot with functions such as smoke exhaust, fire extinguishing, air supply, cooling, dust removal, obstacle clearance, environmental detection, image acquisition, wireless information transmission, and climbing obstacles to handle various accidents safely and efficiently instead of firefighters.

> PRODUCT FEATURE

- 1. Metal bones embedded in the chassis walking track
- 2. Adopting a triangular tracked carrier mechanism design to improve the walking stability of the robot
- 3. System equipped with multiple groups of self spraying cooling devices, which can provide water source for spray, water spraying or foam
- 4. Adopting advanced wireless communication technology, with long communication distance and strong anti-interference ability
- 5. Fan hydraulic drive, high transmission efficiency, low system heat generation, and low noise
- 6. Fire robots provide sound and light alarms during fire operations
- 7. The lifting type air cannon with smoke exhaust and fire extinguishing function can perform multi-dimensional fire and smoke exhaust; Independent water cannon inlet, not affected by water pressure, effectively improving fire extinguishing efficiency
- 8. The front end of the robot is equipped with a push shovel device, which can be used for clearing obstacles in complex fire scenes

> PRODUCT FUCTION

- Fire water monitor: water and foam dual-use monitor, 80L/s flow, range>85m
- Fan: exhaust air volume>100000m3/h, fine water mist flow rate>8L/s
- Image acquisition: Collect 4 images around the robot and transmit them to the control center remotely at all times
- Self protection function: multiple sets of self spraying cooling devices
- Lighting: front four and rear two LED strong lighting lights
- Control method: Car mounted panel and wireless remote control, remote control distance 1KM
- Cooling system: dual cooling modes of air cooling and water cooling are used for the diesel engine and hydraulic oil system

TECHNICAL SPECIFICATION

CHASSIS CONFIGURATION PARAMETER			
Overall dimensions	<3100X1900X2400mm	Braking distance	<0.3m
Weight	<4500Kg	Bulldozing capacity	>25KN
Walking speed	>1.5m/s	Steering mode	360 ° turn in place
Control mode	Wireless control	Cooling system	Dual forms of air and water cooling for heat dissipation
Vibration system	Metal spring+high-pressure oil cylinder shock absorption	Hydraulic drive form	The robot adopts an imported hydraulic system
Climbing angle	>60%	Linear deviation	<3%
Tilt stability angle	>30 °	RC distance(line of sight)	1000m
Traction force	>30KN	Gas detection	Yes
Max obstacle crossing	>250mm	The Frontend and backend of the robot body are equipped with fixed cameras, and the front air cannon is equipped with follow-up cameras	
AIR CANNON CONFIGURATION PARAMETERS			
Exhaust air volume	>100000m3/h	Pitch angle	≤ -10 °,>60 °
Water mist flow rate	>8L/s	Lifting height of smoke exhaust fan	>1.5m
AUXILIARY SYSTEM PARAMETER			
Flow rate	>80L/s	Maximum Range	>85M
Water pressure	>1.0Mpa		

APPLICATION FIELDS

Suitable for highway (railway) tunnel fires, underground facilities and freight yard fires, large-span and large-space factory fires, petrochemical oil depot and refinery fires, etc. It can also be used for target reconnaissance, attack, and cover in large-scale toxic gas and smoke accidents and dangerous fires. It is suitable for firefighting fires that are not easily accessible to personnel and emergency rescue in dangerous situations.