

### 1.3 RXR-M120GD-AHHC four-wheel drive fire extinguishing robot



#### Overview

The robot consists of a four-track chassis, a fire cannon and a handheld terminal. It can effectively replace trailer cannons and mobile cannons. It uses its own power to remotely control the fire cannon or water mist blower to the required position; it can effectively replace fire fighters near fire sources and dangerous places. Carry out reconnaissance, fire extinguishing, smoke exhaust and other operations. Operators can carry out fire-fighting operations up to 1,000 meters away from the fire source to avoid unnecessary casualties.

#### Product advantages

- The four-track carrier mechanism design has strong off-road capability and good passability. It can easily pass through soft ground and large slopes, ditches and other obstacles. It has a small turning radius and flexible steering, and is not affected by weather, terrain and other factors. It is especially suitable for Water, ice, snow, mud, potholes and other complex terrains.
- Remotely control the rotation, pitch, or set any angle of the fire monitor, automatically sweep, automatically return to position, and automatically switch the spray mode;
- Equipped with a water spray active cooling system, which can realize mutual conversion between automatic control and manual control;
- High-power servo drive system, strong fire hose dragging ability;
- MESH wireless digital transmission system has long communication distance and strong anti-interference;
- High-definition video collection system, long-distance video surveillance, flame and smoke identification;
- Equipped with a variety of gas detection equipment to meet different on-site needs;
- Equipped with a millimeter-wave radar obstacle avoidance system, it can automatically identify the distance of obstacles, with high sensitivity and long detection distance;
- High power lighting system with long auxiliary lighting distance and wide coverage.

Product features

long term operation

Equipped with a strong cooling water cooling system, the whole machine can operate efficiently for a long time.

Radar function

The front end of the robot is equipped with an ultrasonic

Environmental detection function

The robot is equipped with temperature and humidity sensors to measure the temperature and humidity environment on site.

Video surveillance function

The 360° PTZ monitoring system and high-definition camera can realize all-round and three-dimensional video collection.

Quick charging function

A fast charger is installed on the chassis to fully charge the robot battery quickly.

Ranging function

The front end is equipped with a laser range finder to measure the distance from the robot accident site, and the remote control displays the data.

Fireextinguishing function

The fire cannon not only ensures an adequate supply of water flow, but also improves the effective use of fire water, and the fire water cannon can swing at any angle.

Gas detection function (optional)

The robot can detect the content of 8 toxic, harmful and flammable gases at the accident site and the remote control panel displays the data.

Integrated transmission of images and numbers

Robots and handheld remote control terminals can realize point-to-point and point-to-multipoint control methods through the wireless image-digital integrated digital transmission module, and can also add relays in tunnels, highways or underground tunnels to realize the resuming transmission function.

Thermal imaging system (optional)

The advanced polycrystalline silicon uncooled focal plane infrared detector can clearly present the infrared thermal image of the object under observation. It has no baffle design and the observation image is not interrupted.

On-site rescue

The robot has a certain load capacity and can drag rescue vehicles into disaster scenes to rescue trapped people in a timely manner.

## Technical parameters

Product model	RXB-M120GD-AHHC
<b>Basic configuration parameters</b>	
Applicable fields	Fires in highway (railway) tunnels, fires in subway stations and tunnels, fires in underground facilities and freight yards, fires in large-span and large-space factory buildings, fires in petrochemical oil depots and refineries
Overall dimensions	Length 2262× Width 1593× Height 1382mm
Curb weight	2000Kg
Running gear	All-terrain high-strength crawler tracks with an internal all-metal skeleton
Traction	11KN
Ground clearance	250mm
Turning radius	Can turn in place
Vertical obstacle clearance height	400mm
Roll stability angle	30°
Climbing ability	30°
wading depth	300mm
straight speed	3m/s
Full power continuous working capability	10h
Protection level	IP65
<b>Chassis drive form</b>	
Chassis model	ATV hydraulic self-propelled
Engine power	46kw ( 2200r/min )
Traveling speed	0-12Km/h
cooling system	Maintenance-free oil cooling system
Water mist protects itself	Auto body water mist spray protection system
Manipulation form	Electronic wired and wireless remote control, remote control distance 1000m.
Hydraulic tank capacity	50L
Hydraulic reservoir capacity	50L
continuous working time	10h
Drive form	Four-track walking mechanism
<b>Robot equipped equipment configuration parameters</b>	
lighting equipment	Front 2*35W, rear 2*15w
Gas detection type (optional)	8 kinds
Reconnaissance system	Thermal imaging system (optional) + wireless high-definition infrared pan-tilt camera system
Voice system	Two-way audio transmission
<b>Fire monitor configuration parameters</b>	
Fire extinguisher type	water or foam
Material	Anti-corrosion high-strength aluminum alloy
work pressure	0.8MPa
water cannon flow	120L/S
Foam cannon flow	120L/S
water cannon range	100m
foam cannon range	95m
Horizontal angle of rotation	-90~90°
pitch angle	-30~90°
<b>Image acquisition configuration parameters</b>	
camera	four
Horizontal rotation range	360° continuous rotation
vertical rotation range	Vertical +90° ~-90°
Effective pixels	2.8 million pixels
Resolution	1920 ( H ) *1080 ( V )

Handheld remote terminal configuration parameters	
Remote control range	1000 meters (with no obstructions)
Weight	5kg
Work hours	5h
Display screen	10.1-inch high-definition, high-brightness display screen
Video output	One-to-two HDMI video output
One-to-two HDMI video output	Supports video recording and can copy with TF card.
Video display	Supports 4-channel AHD video display and can switch between single and quad display modes.