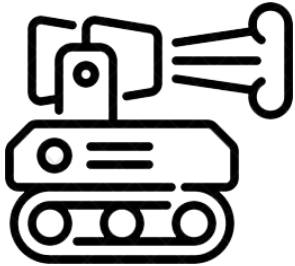


COBRA-I

Portable Fire & Rescue Robot





Robot Firefighter

- Exposable to lethal environment
- Remote control from a safe distance
- Save the hands of human firefighters
- Increase firefighting efficiency & safety
- Endurable to all tough tasks
- Robots can protect itself
- Affordable to loss



Human Firefighter

- NOT exposable to lethal environment
- Have to be close to the fire scene
- Need more hands to hold a steady monitor
- Efficiency depends on human physical strength
- Need to rest and refreshment
- Need to wear PPE to get protected
- NOT affordable to loss

RXR-MC10400D-30



Portable Fire & Rescue Robot

This mini robot consists of a robot platform, power pack, remote control, and water cannon.

The mini size of the robot makes it quicker to deploy, easier to access to a limited space of a fire scene and handier to keep the robot in a fire truck cabinet after use.

This robot is mainly used for fire fighting and rescue missions in cities, chemical industries, tunnels, airports, seaports, steel plants, and factory workshops. It has an important significance in improving rescue security and reducing human fire-fighter casualties

SMALL & TOUGH

Detachable Water Cannon

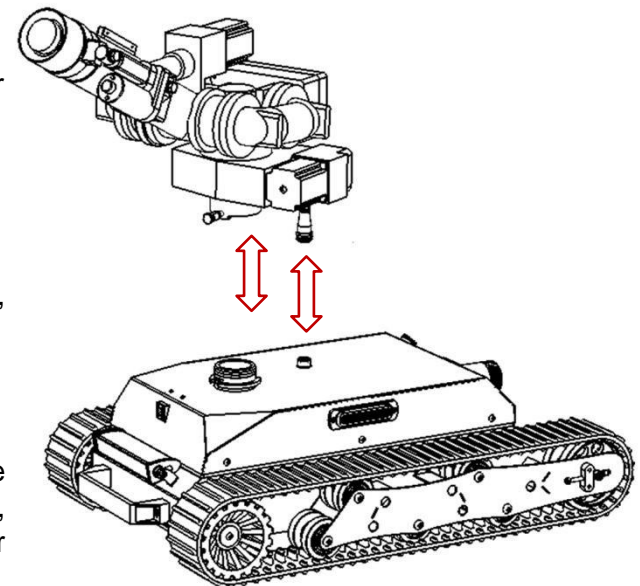
The water cannon can be manually bolted on & off in order to amount other module equipment such as Multi-function Bucket.

Easy to transport

The mini size of the robot allows it to easily fit into a fire truck cabinet, making it easier to transport and making it possible that human fire fighters, fire trucks and robots to reach the fire scene at the same time.

Faster to Deploy and Retrieve

The lightweight robot (60Kg) allows 2 human firefighters to carry to fire scenes such as higher floors of buildings, tanker truck fires on highways, forests, etc, making it faster to deploy to a fire site and faster to retrieve later from the scene.



RXR-MC10400D-30



FIRE FIGHTING: The rated water flow of the Water Cannon is 30L/s with water spout shoot range over 40m under 0.8MPa water pressure. Real-time communication technology ensures transmission of data. The human fire-fighters can operate the robot at 200 meters distance away from the explosive and extremely hazardous fire scene while get the job done.

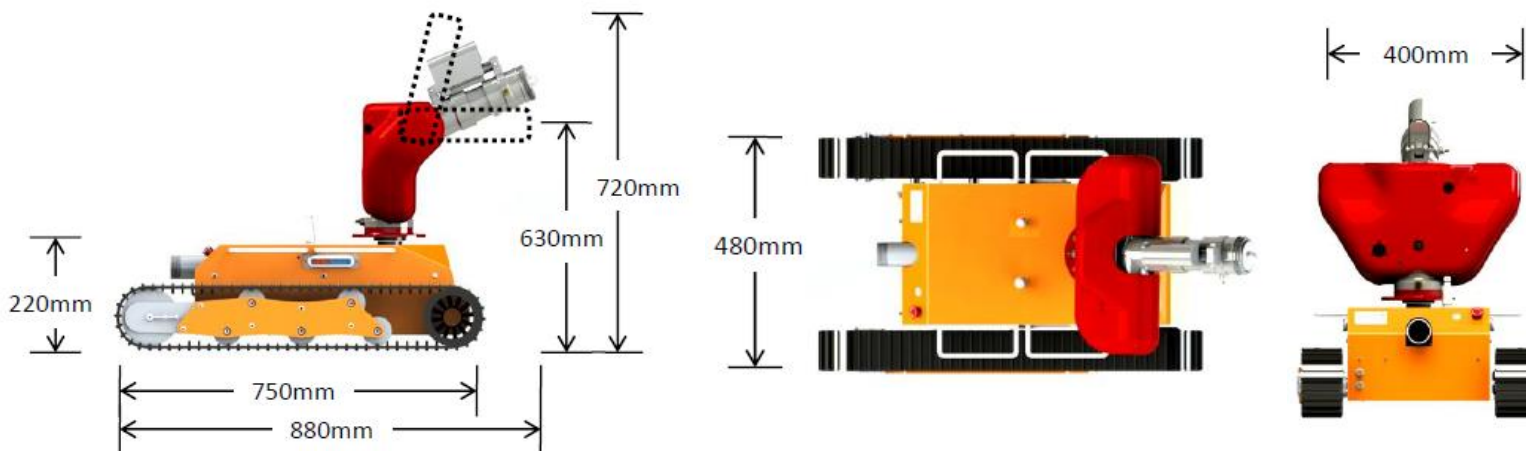
SELF-COOLING: The additional two sprayers can provide water curtain to protect the robot itself from heat radiation.

LIGHT ALARM: The light alarm system at both sides of the robot can give warning to its surroundings to ensure the safety when moving or when starting to move. And also can indicate robot location to operators.

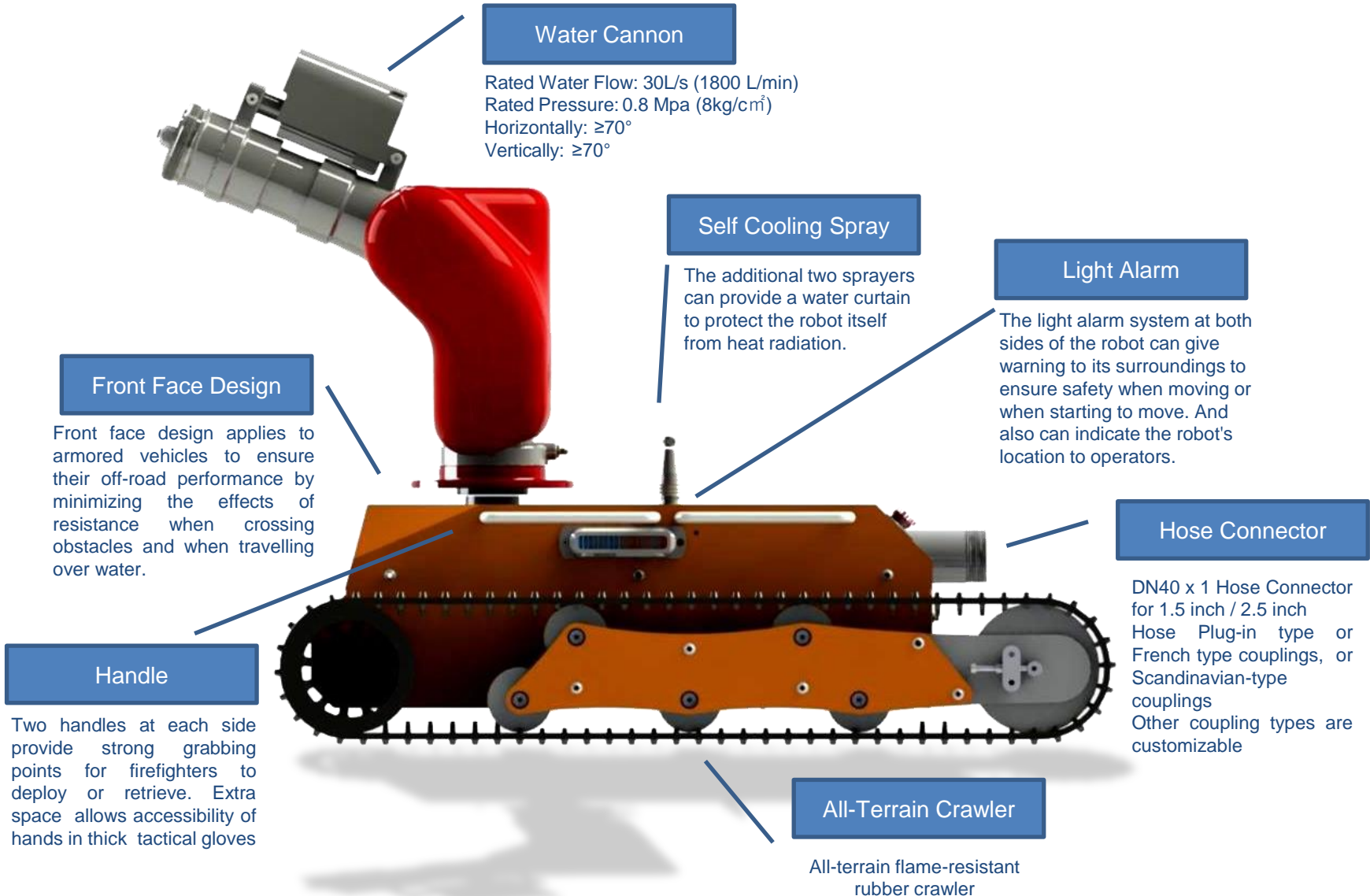
ROLLER SKID (Optional): The fire truck compartment can be equipped with a roller skid, which is convenient for firefighters to put in or take out the robot from the fire truck compartment by sliding the robot on the roller tray.

WHEELED STRETCHER (Optional): The robot can be equipped with a wheeled stretcher to carry the wounded personnel or materials such as oxygen cylinders, fire-fighting hatchets, break-in tools, water, foods, and other materials to save human fire fighters' energy.

HOSE CARRIER(Optional): The hose carrier can be used alone or in conjunction with the robot to reduce the contact area between the hose and the ground, thereby reducing the friction between the hose and the ground, and improving the hose arrangement and fire extinguishing efficiency.



RXR-MC10400D-30



Water Cannon

Rated Water Flow: 30L/s (1800 L/min)
Rated Pressure: 0.8 Mpa (8kg/cm²)
Horizontally: ≥70°
Vertically: ≥70°

Self Cooling Spray

The additional two sprayers can provide a water curtain to protect the robot itself from heat radiation.

Light Alarm

The light alarm system at both sides of the robot can give warning to its surroundings to ensure safety when moving or when starting to move. And also can indicate the robot's location to operators.

Front Face Design

Front face design applies to armored vehicles to ensure their off-road performance by minimizing the effects of resistance when crossing obstacles and when travelling over water.

Handle

Two handles at each side provide strong grabbing points for firefighters to deploy or retrieve. Extra space allows accessibility of hands in thick tactical gloves

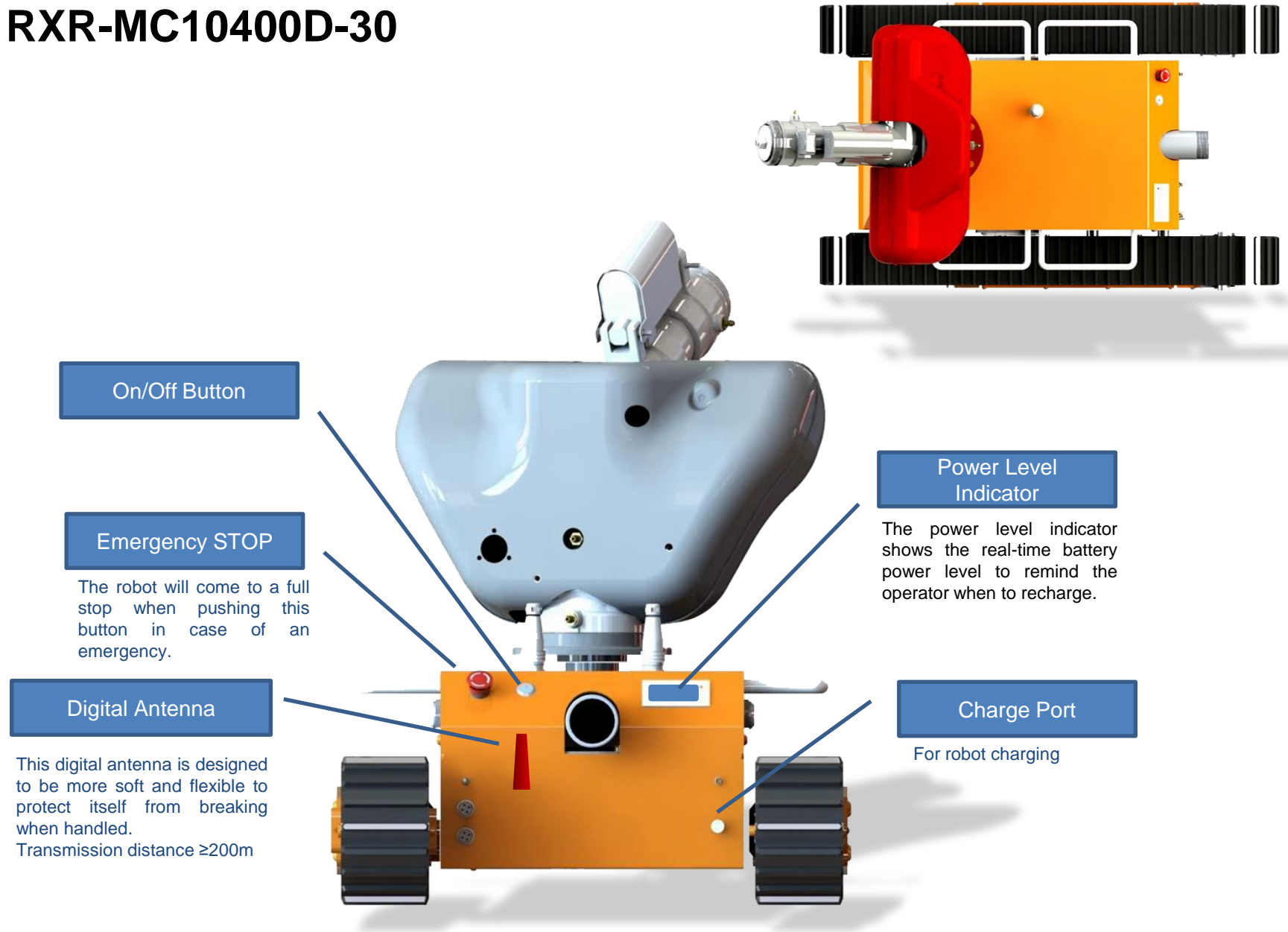
Hose Connector

DN40 x 1 Hose Connector for 1.5 inch / 2.5 inch Hose Plug-in type or French type couplings, or Scandinavian-type couplings
Other coupling types are customizable

All-Terrain Crawler

All-terrain flame-resistant rubber crawler

RXR-MC10400D-30



On/Off Button

Emergency STOP

The robot will come to a full stop when pushing this button in case of an emergency.

Digital Antenna

This digital antenna is designed to be more soft and flexible to protect itself from breaking when handled.
Transmission distance $\geq 200\text{m}$

Power Level Indicator

The power level indicator shows the real-time battery power level to remind the operator when to recharge.

Charge Port

For robot charging

RXR-MC10400D-30



Multi-function Bucket (Optional)

A multi-function bucket can be mounted on top of the robot to carry around 20Kg of food, water, and other lift-saving equipment during rescue mission. It can also contain counter-weights to add up robot's dragging force.

ROLLER SKID (Optional)

The fire truck compartment can be equipped with a roller skid which is convenient for firefighters to put in or take out the robot from the fire truck compartment by sliding the robot on the roller skid

Rescue Cart Function (Optional)

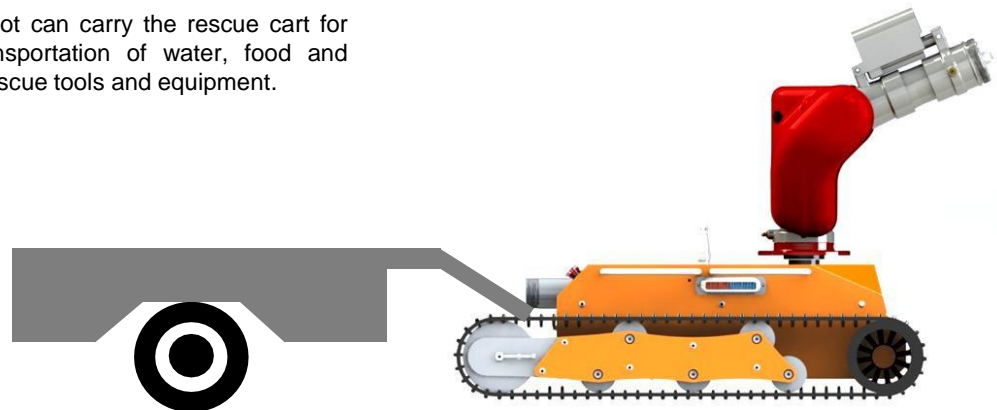
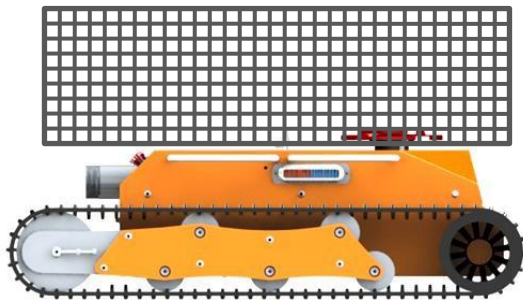
The robot can be equipped with a Rescue Cart to carry oxygen cylinders, fire-fighting hatchets, break-in tools, water, foods, and other materials into the fire scene to save human fire fighters' energy. The robot itself can drag 50Kg materials or carry 20Kg materials.

WHEELED STRETCHER (Optional)

The robot can be equipped with a wheeled stretcher to carry the wounded personnel or materials such as oxygen cylinders, fire-fighting hatchets, break-in tools, water, foods, and other materials to save human fire fighters' energy.

CARRY RESCUE MATERIALS

The robot can carry the rescue cart for the transportation of water, food and other rescue tools and equipment.



RXR-MC10400D-30

Technical Specifications



BASIC DATA	
Color (Optional)	Dark Grey / Dessert Yellow / Red / Blue / White
Dimension	L750xW480xH720mm(including water cannon at 70° tilt angle & hose accessories)
Weight	≤60kg(with all accessories)
Crawler	All-terrain flame-resistant rubber crawler
Power	Battery Pack, 24V34AH
Motor	2.3KW x 2 Electric Driven Servo Motor
Travelling Speed	1.0m/s
Crossing Height	70mm(without slope), 100mm(with slope)
Climbing Angle	≥30° (Slope)
Traction Force	≥400N
Turning Radius	Turning in place
Control Mode	Remote Control
Continuous Travel Duration	2 Hours
Continuous Work Duration	16 Hours (without load)
Control Distance	≥200m
Protection Grade	IP65, water-proof

RXR-MC10400D-30

Technical Specifications



WATER CANNON (Detachable)			
Extinguisher Types	Water		
Material	Body: 304 stainless steel, Head: hard aluminum alloy		
Work Pressure	0.8 Mpa (8kg/cm ²)		
Work Pressure Range	0.6~0.8MPa		
Spray Mode	Waterspout / Water mist (Switchable during work)		
Rated Water Flow	30L/s (1800L/min)		
Shoot Range	40m (@0.8MPa) (8kg/cm ²)		
Rotation Angle	Horizontally 70°, Vertically ≥70°		
Hose Connector & Size	DN40 x 1, with 1.5 inch or 2.5 inch hose couplings		
CONFIGURATION			
Self-Cooling	Standard	Light Alarm	Standard
Charger	Standard	Roller Skid	Optional
Wheeled Stretcher	Optional	Hose Carrier	Optional
Four-direction Coupling	Optional		

