



Manufacturer of Firefighting Equipment and Foam

Firefighting Explosion Proof Robot

ATEX approved



Semi-Autonomy AI-Powered



Corrosion Resistant Stainless Steel 316 L Body



Panoromic 360° View + 30x Optical Zoom



Digital Array Microphones



Voice Command/Gesture Recognition



7200 lpm Foam/Water Monitor



Multi Gas Detector



Thermal Camera



Flame Detector Based on Image Processing



50 Hours Working Time



1.5 km Distance Remote Range



Ad-hoc Function



IP 67 (Water and Dust Proof)

General Description	
Type	AI Based Firefighting and Rescue Robot, Semi–Autonomous
Model	Smart–Tron–72
Application	Industrial Firefighting, Municipal Firefighting, Hazardous Areas, Oil and Gas Industries
Protection	Exd [ib] II B T4 Gb, IP67 for Base, IP65 for Lifting Platform
Approvals	ATEX by TUV Germany IECEX by TUV Germany EN ISO 12100:2010, EN 60204–1:2018 by ECM Italy EN 61000–6–4:2007+A1:2011, EN 61000–6–2:2005 by ECM Italy EN 61000–3–2:2014, EN 61000–3–3:2013 by ECM Italy
Temperature Max Allowance	200°C for 10min 300°C for 2min
General Specifications	
Weight	740Kg
Dimensions	Length1860xWidth900xHeight1350mm
Body Type	All–terrain high–strength crawler with steel skeleton as stiffeners. Stainless Steel 316 Plates and Platform for corrosion resistance
Traction Force	5800N
Speed	2.0m/s (variable speed depends on the motion joystick movement), Speed Limiter
Obstacle Crossing Height	260mm
Roll Angle	35°
Climbing Angle	40°
Turning Diameter	1900mm
Control Modes	Wireless by Remote Control Panel, Voice Commands, Gesture Recognition
Continuous Running	3h
Working Hours	50h
Wading Depth	400mm
Communication Range	1.5km by Main Antenna 300m by Fast plug Antenna Ad–hoc extended range technology
Suspension System	Shock Absorption by Oil Pressure Damping
Suppression System	Active Recoil Suppression System for more stability
Features	
Head Lights	Two LEDs 20Watt, Automatic light intensity adjustment by ambient light
Lifting Platform	Multi–Level Connecting rod Type, 650mm Lifting Height For housing the Gas Detector, Microphones, Speaker, Panoramic Cameras, On/Off Lamp, Projector Light
Multi Gas Detector	CO NH3 H2S O2 CO2 SO2 CL2 H2 flammable gas VOC
Location Services	Precise Internal GPS
Microphone	6 Internal Microphones, Active Noise Cancellation, Smart Microphone Matrix System that can show the direction of the voice (360o smart sound source location pointer)
Follow–Up Camera	HD resolution with 30x Optical Zoom
Platform Camera	360° Surround View (Panoramic View)

Gesture Recognition System	Activated by double head cameras Commands: Forward/Backward Moving, Platform Upward/Downward Moving, Fire Monitor Left/Right Moving
Voice Commands	Activated by Password on the remote control panel Commands: Forward/Backward Moving, Platform Upward/Downward Moving, Fire Monitor Left/Right Moving
Voice Transmission System	Bidirectional Audio Digital Data HD Transmission
Drive System	2x Electric Motors, 3000W
Flame Recognition	Based on Image Processing
Obstacle Avoidance System	Max distance to the obstacle is 5m Precision is 1cm Activating/Dis-activating by the remote control panel
Thermal Camera	Color Camera, the max temperature location system
Thermal Sensors	Body/Motors/Batteries/Ambient temperature sensors
Foam/water System	
Foam/Water Monitor	Low-Friction, Stainless Steel 316 Body, Jet/Fog Nozzle, 4800/7200lpm, 80/90m Max through Length Foam Extended Tube
Inlet Connection	3x2.5" Quick Couplings (BS/Storz/JIS/NST)
Remote Release Mechanism	Activating in three steps by the remote panel (For safety this mechanism will be activated when the line pressure is below 1.2bars)
Automatic Cooling System	Adjustable Temperature Water Curtain Manual remote activation by Solenoid valve from the remote control panel
Activating	Internal On/Off Valve
Sensors	Internal Pressure Transmitter and Flow Meter
Remote Control Panel	
Type	Multi Touch LCD Screen with activation keys and joy-stick
Size	15.4 inch
Weight	4.5Kg
Connections	WiFi, 2xUSB3, 2xUSB2, RS232
OS	Microsoft Windows
Working Time	7.5 hours
Features	Cameras views, switch Camera, Robot information, Voice facilities, Movements, Voice Commands, Platform control, internal storage for video record, recording the information of all robot sensors based on time, sending videos to another device, GPS
Extra Parts	
Hard Carrying Case for Remote Control Panel	
Aluminum Ladders	
Chargers for the Robot and Remote Control Panel	
Cover	
Main Extended range Antenna	
Tools	
Spare Parts	

Field application



- Firefighting robots combined operation

- Firefighting and rescue in oil tank farm



- Firefighting and rescue in oil rig pipeline area



- Firefighting and rescue in factory warehouse

