

Command

Wireless

COFDM Point to Multi-Point dual-channel radio frequency telemetry provides in excess of 1km line of sight with excellent control over long distances in built up areas and inside buildings.



Graphical User Interface



Command Console

Optional Accessories



PZ Camera



Radiation Sensor Mount

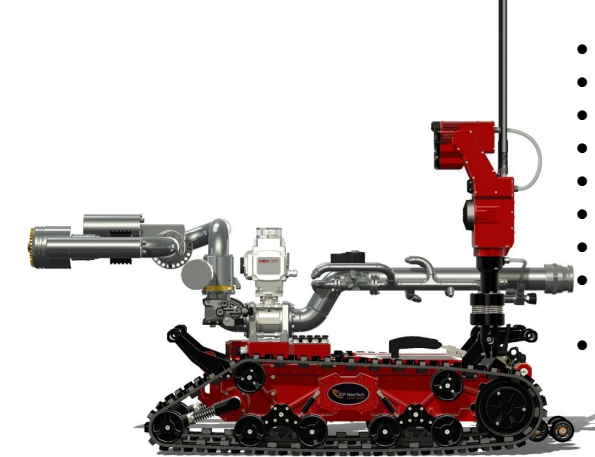


Multi Rae Sensor Mount



Transit Case

The standard Avenger^{FIRE} comprises of:



- Avenger^{FIRE} FFR
- Wireless RF System
- Command Console
- PS5 Controllers
- Spare Battery Set
- Battery Chargers
- Anti-Flip Device
- Two-way Communication Headset
- FFR Tool Kit

Optional Accessories

The Avenger^{FIRE} can be supplied with a number of optional accessories, these include: PZ Camera; Rear Drive Camera; MultiRae Sensor & mount; Radiation Sensor & Mount; Vehicle Console Power Adapter; Additional FFR Batteries; Lithium FFR Battery upgrade; Spare Parts Kit; Transit Case.

Additional accessories are always being generated. It is possible to manufacture accessories specific to customer requirements. Call to discuss.

Note.: Every effort has been made to ensure the accuracy of this document, however this information is based on design and prototype activities and may change without notice.

For complete Product Specifications, please contact your authorized ICP NewTech representative.

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AVENGER^{FIRE}
Fire Fighting Robot



Cost effective, highly versatile Robot for Fire Fighting, HAZMAT and CBRN tasks

Remote Where Possible

The Avenger^{FIRE} FFR

The Avenger continues to evolve, following End User requirements the successful Avenger UGV has evolved into a Fire Fighting Robot (FFR). The Avenger^{FIRE} is a medium weight, robust portable robot both capable and rugged.

The Avenger^{FIRE} features a Force 50 Robotic Nozzle which has a flow rate of 2000 lpm. In addition, this FFR features a cooling system which effectively addresses the build-up of thermal radiation.

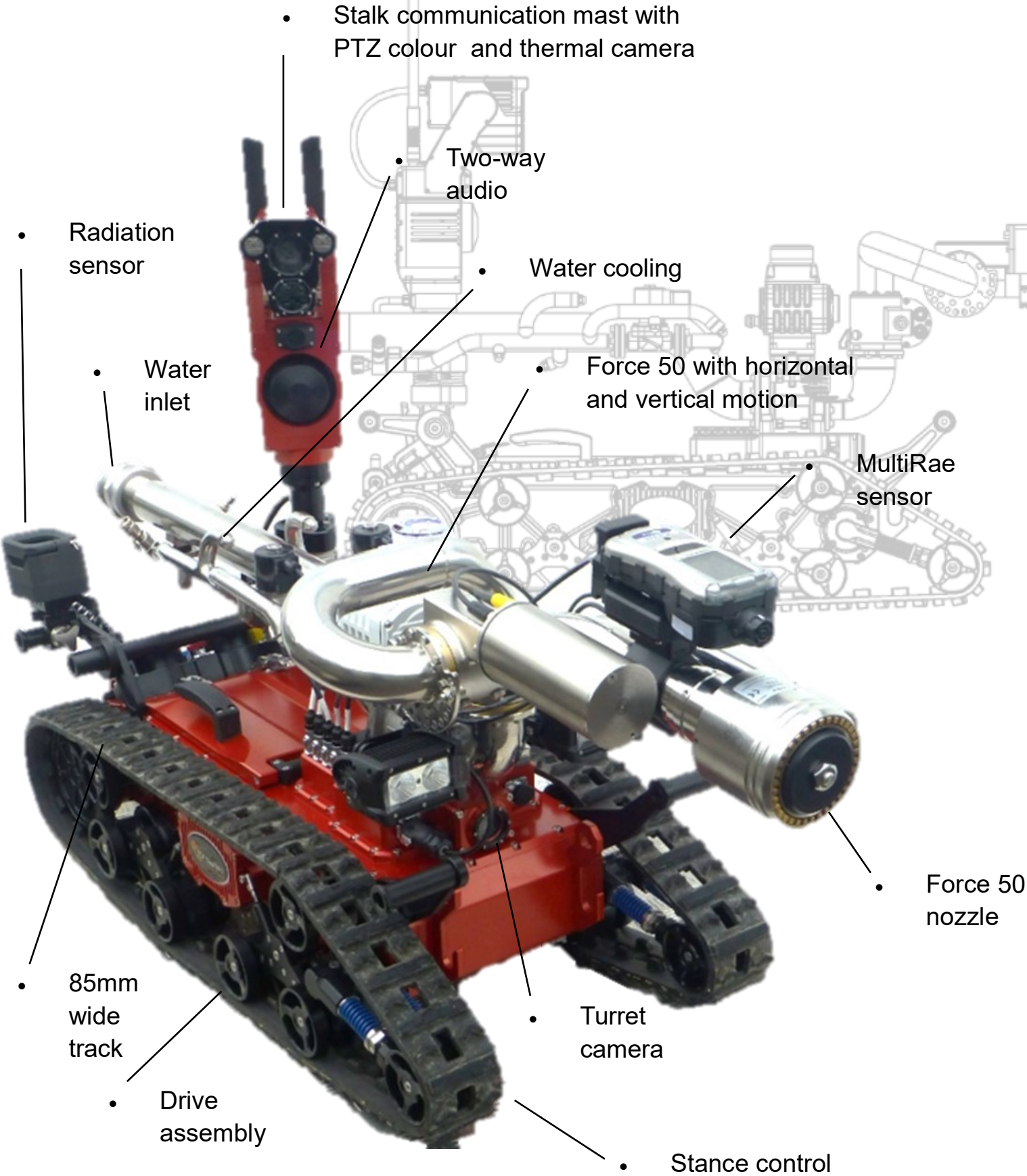
The Command Console is built around a ruggedized laptop and features a touch-screen display showing three camera images, system telemetry, status information and allows menu access to associated control functions.

The Command Console is supplemented with a PlayStation® controller providing precise and effective control of this FFR. In addition, the Avenger^{FIRE} is also supported by an independent Hand Control providing limited function working on Bluetooth.

The level of computer interface allows the system to be upgraded without change to the hardware: it also provides the digital architecture for the inclusion of CBR Sensors.

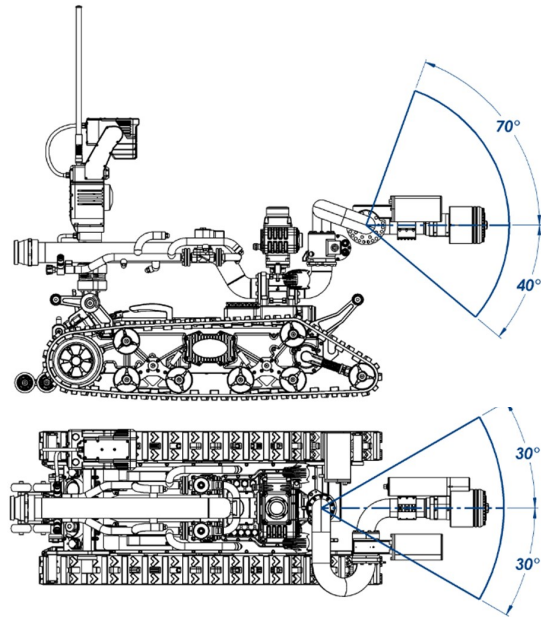
Key Features

- Anodized aluminium chassis and stalk construction.
- Stainless steel Force 50 water cannon nozzle.
- Water cooling system.
- Drive speed of up to 8 kmh.
- Wide tracks with stance control feature.
- Ascends / descends stairs up to 40°.
- Variable speed control.
- Outstanding capabilities for mobility and mounting CBRN Sensors.
- Four I/O Ports for additional payloads such as sensors, detection devices and cameras.
- Three cameras as standard.
- Two-way directional cameras.



PLATFORM

Dimensions (LxWxH):	1400mm x 450mm x 840mm
Weight:	122kg (Chassis & Nozzle)
Speed:	8km/h
Environmental protection:	IP66
Vertical obstacle:	300mm
Stair climb:	40°
Cameras:	3 built-in cameras
Illumination:	Spotlights, LEDs, IR LEDs and Thermal
Communication:	Point to Multi Point MIMO
Operating range:	500m LOS & 200m NLOS
Power Supply:	Set of three SLA batteries
Working time:	36V 4 hours (mission dependent)



FORCE 50 ROBOTIC NOZZLE

Degrees of Freedom:	110° vertical range of motion. 60° horizontal range of motion.
Material:	316 Stainless Steel
Inlet:	2" ANSI Flange
Maximum Flow:	2000 LPM
Maximum Throw:	Up to 65m
Normal Operating Pressure:	10 bar
Max Working Pressure:	12 bar