

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

The standard Avenger^{2.0} comprises of:



- Avenger^{2.0} UGV
- Wireless RF System
- Command Console
- PS5 Controllers
- Spare UGV Battery Set
- UGV Battery Chargers
- Two-way Communication Headset
- UGV Tool Kit
- UGV Back-up
- Operator Manuals
- Wooden Shipping Crate

Optional Accessories

The Avenger^{2.0} can be supplied with a number of optional accessories, these include: Disruptor Mounts; Shotgun Mounts; X-Ray Mount; Finger Enhancement Kit; Rear Drive Camera; MultiRae Sensor & mount; Radiation Sensor & Mount; Vehicle Console Power Adapter; Additional UGV Batteries; Lithium UGV 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.

Typical Optional Accessories



Universal Disruptor Mount



Benelli M4 Shotgun Mount



Radiation Sensor Mount



Multi Rae Sensor Mount



Transit Case



AVENGER^{2.0}

Unmanned Ground Vehicle



Cost effective, highly versatile UGV for EOD/IEDD, HAZMAT, CBRN and Tactical tasks

Remote Where Possible

The Avenger^{2.0} UGV

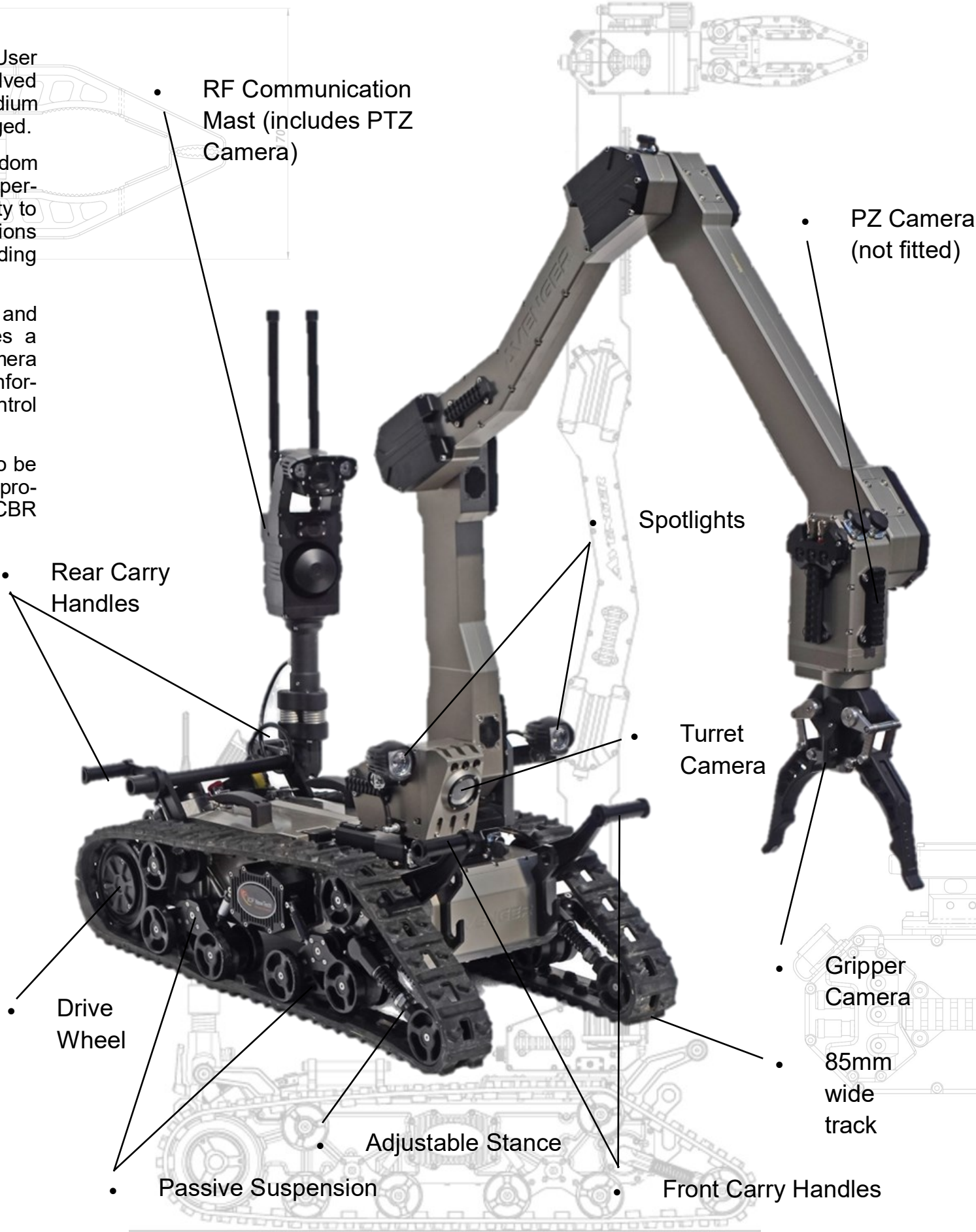
The Avenger continues to evolve, following End User requirements the successful Avenger UGV has evolved into the Avenger^{2.0} UGV. The Avenger^{2.0} is a medium weight, robust portable robot both capable and rugged. The Avenger^{2.0} features a seven Degrees of Freedom Manipulator Arm. It can perform missions typically performed by larger robots and due to its organic ability to integrate 3rd party equipment, it has many applications in Military and Law Enforcement missions including SWAT.

The Command Console epitomises “ease of use” and is built around a ruggedized laptop and features a touch-screen display showing as standard, two camera images, 3D avatar, system telemetry, status information and allows menu access to associated control functions.

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.

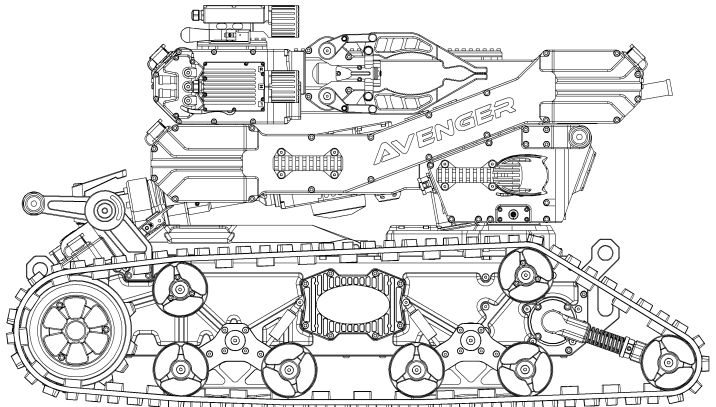
Key Features

- Anodized aluminium chassis and manipulator Arm.
- Drive speed of up to 8 kmh.
- Wide tracks with stance control feature.
- Ascends / descends stairs up to 45°.
- Variable speed control for drive and manipulator arm.
- Manipulator arm with 7 Degrees of Freedom with several pre-set positions.
- Low profile to reach under vehicles.
- On-board PC
- Outstanding capabilities for mobility and mounting CBRN Sensors.
- Fourteen I/O Ports for additional payloads such as sensors, detection devices and cameras.
- Four cameras as standard.
- Two-way directional cameras.
- Four independent firing circuits
- Mission duration of 4+ hours on single set of batteries (mission dependent).



Specification

PLATFORM	
Dimensions (LxWxH):	1000mm x 450mm x 550mm
Weight:	<112kg (Chassis & Arm)
Speed:	8km/h
Environmental protection:	IP66
Vertical obstacle:	500mm
Stair climb:	45°
Cameras:	4 cameras (plus optional cameras)
Illumination:	Spotlights, LEDs, IR LEDs
Communication:	Point to Multi Point MIMO
Operating range:	1000m LOS & 300m NLOS
Power Supply:	Set of three SLA batteries 36V (two sets as standard)
Working time:	4+ hours (mission dependent)



ARM PERFORMANCE

Lift Capacity (forwards):	50kg @ 400mm.
	20kg @ 1000mm.
	8kg @ 1800mm.
Lift Capacity (rear):	20kg @ 500mm
	8kg @ 1300mm
Lift Capacity (side):	14kg @ 500mm
Vertical Reach:	2500mm (98.5")
Horizontal Reach:	1800mm (70.9")
Horizontal Reach (rear):	1350mm (53.2")
Vertical Reach (below):	1400mm (55.1")
Grasping Force:	40kg