



MERLIN

EOD/Tactical Robotic Vehicle



The Merlin Robotic Vehicle has been designed to provide the optimum in precision manipulation, weapons deployment and surveillance capabilities on a small highly mobile platform. The Merlin vehicle has been Designed to be "Multi-configurable" to permit its use in a variety of Tactical, EOD and Security operations with such features as Multi-positionable camera / Vision systems and a removable Boom / Manipulator / Weapons assembly. This "multi-configurable" capability will permit Merlin to drive under most automobiles or low height passages such as culverts or "crawl spaces" under buildings to provide visual inspection to the operator. Based on Its' small size envelope, light weight and agility, Merlin also is highly functional in environments such as the close confines of aircraft cabins.

Merlin's unique track drive system provides reliable operation over virtually any type of terrain in any weather condition, and the rugged construction of its' on-board handling systems provides enormous lift capacity relative to the small size of the vehicle. Despite its' small size and weight, the Merlin vehicle is fully capable of deploying and firing vehicle mounted Disruptors or Dearmers in EOD operations.

The computer based Command / Control system utilizes the latest in field proven technologies to provide an unequalled level of control and confidence to the operator. The Merlin Vehicle comes equipped with more standard features than any other Robotic vehicle of its type in the world market. Items such as Turret rotation, Manipulator Elbow Axis, Shock reducing disruptor mounts, X-Ray deployment systems are standard equipment, not expensive options that increase the base cost of the Robot..

As with all of our Robotic Vehicles, Merlin features "State of the Art" modular electronics, with such operator friendly features as 2 way audio, and multi-positional cameras which provide improved vision capability to the operator. Command and control of drive, boom and manipulator functions are achieved through the use of proportional speed joysticks for maximum operational simplicity.

Standard Features

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| Dual Tracked Highly Mobile Platform | Freestanding Tether Deployment and Retrieval Reel |
| Highly Dextrous Elbow type Boom Configuration | Proportional Joystick drive and Manipulator Control |
| Turret / Shoulder Rotate and Pitch | Portable, Rugged Computer Based Operator Control System |
| Drive and Inspection Hi-Intensity Light System | 2 way Audio System |
| Quick Change Battery System | Modular Solid State Electronics - Rapid Changeout Capability |
| Rechargeable Batteries (Including Charger) | Environmentally Sealed Chassis |
| Colour Camera - CLaw / Manipulator | Operate in Adverse Climactic Conditions (-20 to +40 Degrees C) |
| Pan / tilt Colour Drive Camera | 300 ft Tether Command Link |

Optional Features

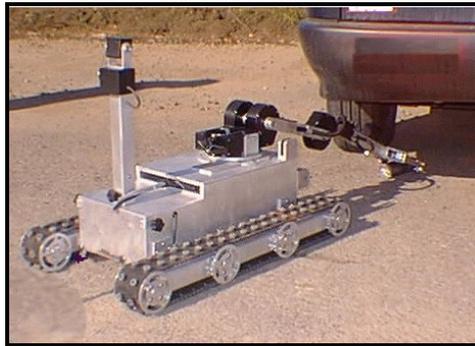
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|---|----------------------------|
| Long Range Wireless Radio Control System | Window Piercing Attachment |
| Boom Extend segments for increased Vertical or Horizontal Reach | Charge Deployment Reel |

Drive System

Quad Motor Hi-Torque Direct Drive
Heavy Duty Track System - 3" Wide Track

Overall Vehicle Dimensions

Length	29.75 inches
Width	17.25 inches
Height (Manipulator)	16 inches
Height (Surveillance)	9 inches
Ground Clearance	2 inches
Weight	60 pounds



Weapons System

Robotically Positioning, Shock Resistant Waterjet Disruptor Mount
Double Redundant Interlocks and Breakers for complete Weapons Safety
Dual Firing Circuits

Manipulator / Boom System

Turret Rotate	340 degrees / Hard Stop	Claw Open	0 to 8 inches
Shoulder Pitch	0 to 220 degrees	Clamping Force	Variable to 50 lbs Max.
Elbow Pitch	0 to 280 Degrees	Max. Lift (Extd)	20 pounds
Max. Vert Reach	46 inches (From Ground)	Max. Lift (Retrd)	50 pounds
Hor.Reach	32 inches (From Vehicle)		



Command / Control System

Computer Based Advanced command System - Proportionally Operated Joystick Controls
Multiple Speed Selections to permit precise control
Fully Modular Electronics for rapid field changeout capability.

Audio / Visual System

Colour Pan / Tilt Drive Camera
Fixed Colour Camera at Claw / Manipulator
2 way Audio Communication System
Video / Audio Recording Capability

Miscellaneous Standard Features

X-Ray Deployment Mount including Source and Cassette Holder
Field Repair Tool Kit, Operating and Maintenance Manuals

Power

Dual 12 Volt DC / Sealed Lead Acid Batteries (24V) - 4 Hour Duty Cycle Min
Quick Change Battery System for Rapid Field Changeout Capability

Guarantee / Warranty

The Manufacturer guarantees all equipment and components for life against defects in manufacturing and/or workmanship. Motors, Gearing and Electronic components are guaranteed for 2 years (excluding batteries). In the event of component failure, the manufacturer shall replace the defective item at no charge within 5 working days to minimize equipment downtime.

All Terra/Tac products are designed in accordance with Terra "AEGIS" program mandates. "Aegis" prescribes that all equipment components be designed with a focus on high reliability, multi-tasking and compatibility with other systems and components to improve asset sharing between EOD / Tactical and Hazmat Teams. Contact us for information on other innovative security products.

- Robotic EOD / Tactical Vehicles
- Smart Hook and Line Systems
- Search Mirrors and Tools
- Escape / Evacuation Ladders

- Hotstic Robotic Manipulators
- Explosive Entry Systems
- TAC Dual Crimpers
- Precision Manufacturing

- Trooper Remote Engagement Systems
- EOD Technicians Tool Kits
- Techsaver Remote Handling System
- RF / Electromechanical Engineering

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