

# PREDAT DR

# **EOD/Tactical Robotic Vehicle**



The Predator robotic Vehicle has been designed to provide rugged, reliable robotic capability to EOD and Tactical teams at a reasonable cost. Capable of operating over virtually any type of terrain in any weather condition, this robotic vehicle provides heavy duty manipulation and weapons deployment capability. The Predator provides exceptional performance through the successful integration of the latest in computer based, command and control technologies, modern design and manufacturing processes and field proven operating systems.

Designed and manufactured by Terra Aerospace to meet the needs of a wide cross section of EOD, Hazmat and tactical teams, the Predator 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 "start-up" cost of the Robot..

The Predator features "State of the Art" modular electronics, and computer based controls, with such operator friendly features as 2 way audio, and multi-positional camera system which allows the operator to postion the claw camera at various locations on the vehicle. Command and control of drive, boom and manipulator functions are achieved through the use of proportional speed joysticks for maximum operational simplicity.

## **STANDARD FEATURES**

Two Motor high torque drive system
4 wheel highly mobile platform
"Wheels-Free" drive disengagement system
Highly dextrous elbow type Boom configuration
Turret/Shoulder Rotate and Pitch
Claw or weapons "prominent" robotic axis
Continuous Rotate on claw end effector
Colour Remote Zoom Pan/Tilt Camera Vision System
Drive and Inspection Hi-Intensity Lights
Multi Positional Colour Manipulator/Weapons Camera
Dual shock reducing Disruptor Mounts
Dual Firing Circuits - Double redundant safety Interlocks

X-ray mount and deployment system 300 ft tether command link
Freestanding Tether deployment and retrieval Reel
Proportional Joystick drive/manipulator control
Portable, rugged Computer BasedOperator Control Station
2 way Audio system
Modular electronics - Rapid changeout capability
Quick change battery system (Rechargeable includes charger)
Environmentally Sealed Chassis
Polyurethane paint finish
Operates in adverse weather conditions (-20 to +40 degrees C )

#### **OPTIONAL FEATURES**

6 Wheel platform Long range Wireless Radio Control system Charge Deployment Reel Shotgun mount/firing system Trooper Remote Engagement System Window Piercing attachment Tactrack track system Spare Battery Pack Robotic Wrist pitch

#### **Drive System**

Twin Motor hi-torque internal chain drive system

Wheels free drive disengagement system (wheels turn when power is off)

Environmentally Sealed, 4 wheel all-terrain platform (optional Add-on platform for 6 wheel configuration)

Claw Rotate = 360 degrees continuous

#### **Overall Vehicle Dimensions**

Length = 40 inches Width = 29 inches Height = 25 inches Weight = 520 pounds

#### Manipulator / Boom System

Turret rotate = 220 degrees with hard stop

Shoulder Pitch = 0 to 200 degrees Claw Open = 0 to 8 inches

Elbow Pitch = +/- 90 degrees Clamping Force = variable to 150 pounds

Max. horizontal reach from vehicle = 48 inch Max. lift capacity - extended = 40 pounds

Max. vertical reach from vehicle = 81 inch

Max. lift capacity - retracted = 75 pounds

### Weapons System

Single or dual multi-positional, shock resistant waterjet disruptor mount Double redundant interlocks and breakers for complete weapons safety - dual firing circuits

#### Audio / Visual System

Colour multi-positional camera mounted at manipulator/claw or weapons Colour camera mounted in fully articulate pan tilt enclosure at vehicle rear 2 way audio communication system

Colour monitor at operator command station

Picture-in-Picture display capability to view 2 cameras simultaneously

Video/Audio recording capability

#### Command / Control System

Advanced operator control station including proportional joystick controls Tether command link including storage and deployment reel - 600 ft Fully modular electronics for rapid field changeout capability

#### **Power**

Sealed dual 12 Volt DC sealed lead acid rechargeable batteries (including charger) - 4 hour duty cycle Quick change battery system for rapid field changeout

#### **Miscellaneous Standard Features**

X-ray deployment mount including source and cassette holder Field repair tool kit, Operating and maintenance manuals

#### Warranty Support

Full one year warranty on all parts and labour
Lifetime warranty against defects in manufacturing and/or workmanship
Parts availability / support for period of 10 years following vehicle purchase
Annual vehicle inspection at Terra Aerospace for period of 2 years following purchase
24 hour/day support network/Hotline for the life of the vehicle

# **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.

Internet Address: www.smarteod.com

- Robotic EOD / Tactical Vehicles
- Smart Hook and Line Systems
- Search Mirrors and Tools
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- Explosive Entry Systems
- TAC Dual Crimpers
- Precision Manufacturing

- Trooper Remote Engagement Systems
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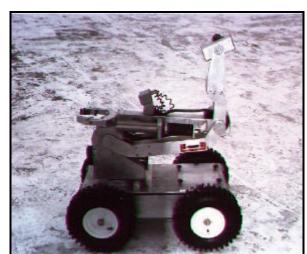
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