

#### H.B.A. solutions for E.O.D.

Due to changes in the security climate and the increase of international terror on all fronts, the field of E.O.D. and dismantling explosive charges has become a crucial component in all security and defense forces, both military and police.

H.B.A. is the leading supplier to the Israeli Police, the I.D.F. and other countries around the world from establishment of robot fleet, modified vehicles and supplying professional equipment for a solitary sapper.

#### Our Integrative Package

Supply, management and operation of robot fleet.  
Specially fitted vehicles including designated E.O.D. tools.  
Sapper equipment, Total Containment Vessels and special needs.  
Professional training for the novice and experienced E.O.D. technician.  
Professional training for operation and maintenance of E.O.D. robots.



SYSTEM INTEGRATORS  
High-tech solutions for defense industries

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Remotec | Keeping Danger at a Distance

# ANDROS WOLVERINE



6x6 WORKHORSE  
with Extended Runtime  
Unmanned Ground Vehicle System

# ANDROS WOLVERINE FEATURES



Manipulator arm with seven degrees of freedom ensuring optimum dexterity

Two 24 volt battery packs for extended run-time

6 wheel drive provides superior all-terrain performance



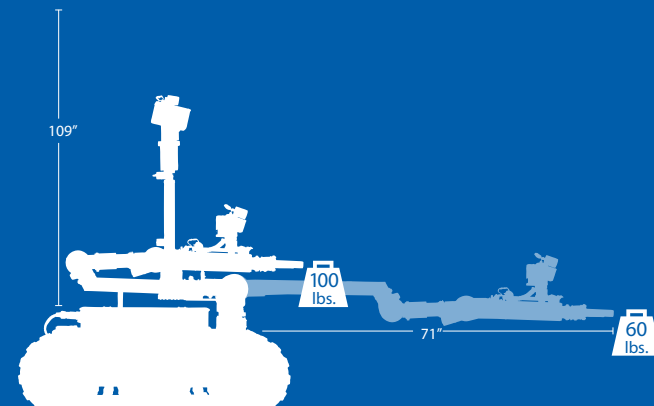
Single module electronics for quick field replacement

## ANDROS WOLVERINE

The Remotec ANDROS Wolverine is the workhorse robot that won't quit until you do. This heavy-duty, all-terrain robot brings superior strength and manipulator dexterity to your longest, most intense missions.



Vertical / Horizontal Extension and Weight Capacities



ANDROS Robots have more quick connect accessories and tools than any other robot company. We have developed a vast array of tools and accessories to remotely solve problems. Call today to see how ANDROS Robots can Keep Danger at a Distance for you.

## Product Specifications ANDROS WOLVERINE

### Dimensions

Height: 69" (1762 mm) with camera extender  
Width: 29" (737 mm)  
Length: 58" (1474 mm)  
Turning: Within the length of the vehicle  
Ground Clearance: 5.5" (140 mm)

### Weight

810 lbs (368 kgs)

### Mobility

Method: 6 wheels with individual drive motors  
Removable tracks & "Free-wheel" mode  
Slope: 45°  
Speed: 0 to 2 mph (0 to 3.22 kph)  
Traverse: Openings up to 19" (482 mm)  
Turning: Within the length of the vehicle

### Manipulator

- Variable speed control for precision
- Dual sided, quick-change accessory mounting system
  - Torso Rotate +/- 170° from center
  - Shoulder 210°
  - Elbow 210°
  - Wrist 210°
  - Wrist extend 8" (203 mm)
  - Grip rotate 360° continuous
  - Gripper 0" to 8" open/close (0 to 203 mm)  
0 to 50 lbs pressure (0 to 23 kgs)
  - Lifting 100 lbs at 18" (45 kgs @ 457 mm)  
60 lbs at full extension (27 kgs @ full ext.)

Vertical reach 109" (2768 mm)  
Horizontal reach 71" (1805 mm) from front of vehicle

### Audio Visual

#### Cameras

#### Surveillance:

- Color Camera with Low Light switching Capability
- 216:1 extra low light color pan/tilt/zoom with full 360° continuous pan 180° tilt
- Auto/Manual Focus and Iris
- 80 watt adjustable halogen light with detachable IR lens
- Motorized camera extender

#### Arm:

- Color camera with Auto/Manual focus
- Auto/Manual Iris
- Manually adjustable tilt
- 80 watt adjustable halogen light
- Manual 40:1 Zoom

- Optional Arm Pan & Tilt Camera (Same camera as Surveillance Camera and is highly recommended.)

#### Front Drive:

- Color fixed focus front (305 mm) to 27.62 m). Auto Iris
- Optional Weapons Camera and laser sighting systems available.
- Optional rear drive camera

#### Audio

2 Way Audio System with weatherproof speaker and microphone mounted on the robot

#### Electrical

7 Isolated firing circuits: 24VDC  
Power Supply: 24VDC spiral-cell Battery Pack  
Battery charger  
JAUS Compliant  
1/4 Turn Connectors: For easy connect, disconnect  
Data Links: Interchangeable Fiber Optic Cable Reel, RF Analog/Hybrid system, or Hard-line cable reel system

#### Environmental

- Sealed weather resistant enclosure
- Wet or dry surfaces
- All terrain

#### Other

- 2.5 days of operator/maintenance training in Clinton, TN
- CD-ROM based operator and maintenance manual
- One year parts & labor warranty.

#### Operator Control Unit (required)

- Removable switchbox for direct connection to the robot
- 15 in. (380 mm) LCD monitor with daylight readable, Anti Glare Screen
- Picture in Picture display with camera selection switch
- Graphic display Vehicle and Console battery condition, Camera setup functions, and Sensor Feedback
- Video and audio output for event recording and optional head set display
- Joystick control for easy navigation
- Removable Key Firing Circuit System
- Heavy duty, portable, weather resistant
- Includes 50 amp-hr. 12VDC battery and 110VAC smart charger/power supply
- Operates on either 12VDC battery or GFI 110 or 220 VAC power cord
- Microphone, speaker, and volume control
- 38 lbs, 10" x 23" x 18" (H/W/D)  
(17.3 kg, 254 x 584 x 457 mm H/W/D)

\* One of the control link options must be purchased