

# ANDROS WOLVERINE

## Unmanned Ground Vehicle System

### AN ALL-TERRAIN WORKHORSE

The Andros™ Wolverine is the ultimate all-terrain workhorse, capable of navigating sand, snow, mud, and many other challenging surfaces with confidence.

Six independent drive motors with removable tracks for “free wheel” mobility mean that the Wolverine has the power to go virtually anywhere you need it to perform.

The Andros Wolverine adds the highly dexterous manipulation capabilities of the Andros™ Spartan and Andros™ FX—giving it the ability to access areas in confined spaces that are typically out of reach.

### VEHICLE AND CHASSIS

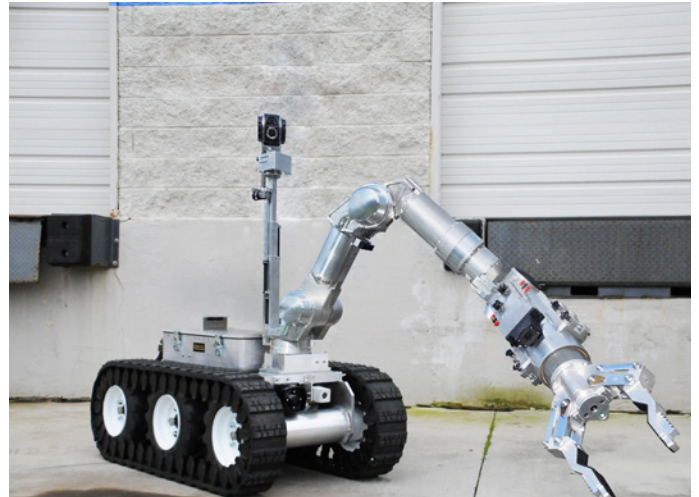
- Six-wheel drive provides superior all-terrain performance
- Vehicle batteries offer extended runtime for assured success during long missions

### EIGHT DEGREE OF FREEDOM MANIPULATOR

- The addition of a roll joint between the elbow and wrist provides the ability to access areas with limited space as well as maneuver around and interrogate vehicles that traditionally required a large working area
- Wolverine has a significantly increased lift capacity of objects and a greater dexterity for handling more challenging missions
- The addition of a gripper palm camera with lights and range estimator allows for faster, more accurate grasping

### OPERATOR CONTROL UNIT

- Consists of a ruggedized laptop with game-style controller and optional large, external touchscreen
- 3-D vehicle avatar helps operators view and visualize the configuration of the arm and articulators
- Advanced behaviors including both factory and user-defined presets, manipulator rewind, and “fly-the-gripper” mode
- Diagnostic and maintenance information is provided via touch screen graphics
- DVR capable



### TECHNICAL SPECIFICATIONS

#### Dimensions

- Height: 69" (1792 mm)
- Width: 29" (445 mm)
- Length: 58" (1474 mm)

#### Weight

- 870 lbs. (408 kg)

#### Mobility

- Slope: 45° incline and 45° stairs
- Speed: 0-2 mph (0-3.2 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: +/-150° w/position feedback
- Shoulder: 221° w/position feedback
- Elbow: 223° w/position feedback

- Upper Arm Roll: +/-170° w/position feedback
- Wrist Pitch: 215° w/position feedback
- Wrist Extend: 6" (152.4 mm)
- Grip Rotate: 360° continuous w/feedback
- Gripper: 0"- 8" (0-203 mm) open/close
- Gripper Force: 0-125 psi (0-609 kPa)
- Gripper Range Estimator: 3.9"-31.5" (10-80 cm)
- Lifting: 275 lbs. at 18" (125 kg at 457 mm); 80 lbs. (36 kg) at full extension
- Vertical Reach: 126" (3.2 m) w/arm fully extended
- Horizontal Reach: 95" (2.3 m) w/arm fully extended

## Cameras

- **Surveillance**
  - Extra low light color pan/tilt/zoom with full 360° continuous pan, 180° tilt
  - Auto/manual focus and iris
  - LED lights with remote switching from white to IR
  - Vertical Surveillance Camera Extend: 24" (609 mm)
- **Arm**
  - Fixed color camera with wide angle lens
  - Optional surveillance pan/tilt camera with optional thermal camera
- **Front and Rear Drive**
  - Color camera that switches to B&W in low light conditions with fixed focus and auto iris
  - Sensitive to IR illumination
- **Palm Camera**
  - Color camera that switches to B&W in low light conditions with fixed focus and auto iris
  - Sensitive to IR illumination
- **Optional Thermal Camera**
  - Mounted alongside the surveillance pan/tilt
- **Optional Tool Camera**
  - B&W low light with fixed focus and auto iris
  - Optional laser enhancing lens
  - Sensitive to IR illumination

## Operator Control Unit

- Ruggedized COTS (commercial off the shelf) laptop w/touchscreen
- Game-style controller
- Integrated docking station for power and communication link
- BB2590 battery with 110VAC/220VAC charger
- Optional legacy switchbox controller

## Audio

- Two-way audio system with weatherproof speaker and microphone

## Communication

- 1200' (366 m) fiber optic cable
- 5W COFDM—license required
  - -1000 m+ line of sight
  - -500 m non line of sight

## Electrical

- 7 isolated firing circuits: 24VDC
- Power supply: 24VDC
  - -4 12VDC spiral—cell lead acid batteries
  - -110VAC/220VAC charger

## Environmental

- Designed to meet IP65
- Sealed, weather-resistant enclosure
- Wet or dry surfaces
- Operating temperature -20°C to +50°C

## Accessories

- Supports Andros legacy accessories including cutting, breaching, sensing, investigating, and hauling

## Other

- 2.5 days of operation/maintenance training in Clinton, TN
- One year limited warranty

## CONTACT US

To learn more about our products and get answers to your questions, contact our sales department:

remotecsales@peraton.com

865.483.0228

