

ANDROS SPARTAN

Unmanned Ground Vehicle System

The Andros™ Spartan was designed based on the success, reliability, and versatility of the 6 series platform—our flagship platform. The Andros Spartan incorporates the same proven chassis design of the Andros™ F6 and adds the highly dexterous manipulation capabilities of the Andros™ FX.

Preserving the legacy of the Andros™ 6 series, the Andros Spartan integrates new technologies, optimizes the user experience, and reduces time on target. These updates are what make the Andros Spartan an industry leader.

VEHICLE AND CHASSIS

- Dual articulating tracks with quick release wheels provide modular mobility for both indoor and outdoor use
- Spartan is powered by nine BB2590 batteries; vehicle speed of 3.3 mph (5.3 kph) and a runtime of more than six hours

EIGHT DEGREES 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 vehicles that have traditionally required a large working area
- Spartan has a significantly increased object lift capacity and a greater dexterity for handling more challenging missions
- The addition of a gripper palm camera with lights and range estimator allow for faster, more accurate grasping

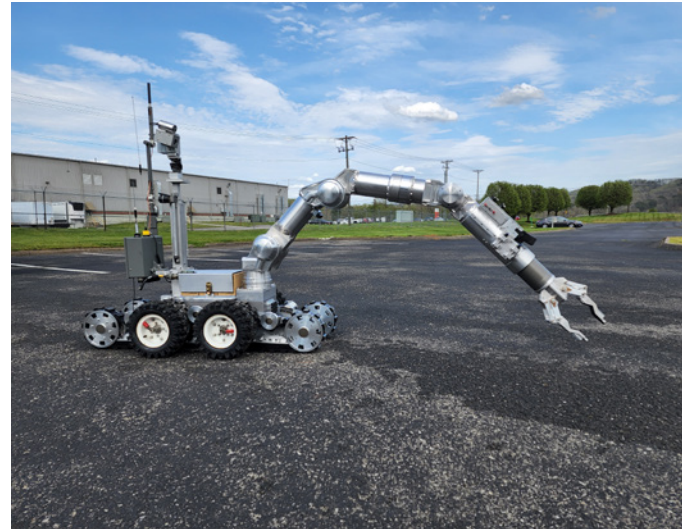
OPERATOR CONTROL UNIT

- 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
- Up to four cameras can be viewed at the same time and single camera mode offers three picture-in-picture camera windows that can be moved and resized
- Diagnostic and maintenance information is provided via touch screen graphics

TECHNICAL SPECIFICATIONS

Dimensions

- Height: 55" (1397 mm)
- Width: 29" (737 mm); 17.5" (445 mm) w/out wheels
- Length: 42" (1066 mm) tracks up



Weight

- 600 lbs. (272 kg)

Mobility

- Articulated tracks with position feedback and quick-release wheels
- Slope: 45° incline and 37° stairs
- Speed: 0-3.4 mph (0-5.3 kph)
- Traverse: gap opening up to 21" (533 mm) and obstacles up to 18" (635 mm)
- Turning: 55" (1397 mm)

Manipulator

- Variable speed control for precision
- Dual-sided quick change accessory mounting system
- Torso Rotate: +/-150° with 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) with tracks down and arm fully extended
- Horizontal Reach: 73" (1.9 m) from front of vehicle chassis

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:**
 - Color camera that switches to B&W in low light conditions
 - 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 in 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
- BB2590 battery with 110VAC/220VAC charger
- Optional legacy style switchbox controller

Audio

- Two-way audio system with weatherproof speaker and microphone

Communication

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

Electrical

- Seven Isolated Firing Circuits: 24VDC
- Power Supply: 32VDC
 - Nine BB2590 batteries, 92aH
 - 110VAC/220VAC charger, 2 six-bay BB250

Environmental

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

Accessories

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

Other

- 2.5 days of operator/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