# Peraton

# **ANDROS SR1**

Unmanned Ground Vehicle System

The Andros<sup>™</sup> SR1 is a lightweight, one-man portable, unmanned ground vehicle system developed for missions requiring first look, fast reconnaissance, tactical response, and render safe for EOD operations.

From reconnaissance and negotiation to forced entry and apprehension, chassis speed and agility coupled with a dexterous and capable manipulator means the Andros SR1 gives a tactical advantage in any mission. Andros SR1 is controlled remotely by an intuitive interface from operating distances that are unmatched in industry and are standard for Remotec platforms.

# **VEHICLE AND CHASSIS**

- Superior all-terrain performance
- Vehicle batteries and an efficient chassis design allows speeds up to 5 mph (8 kph) for quick deployment down range to effectively decrease overall mission time
- Front and rear articulators make obstacle negotiation and stair climbing effortless

# **6 DEGREE OF FREEDOM MANIPULATOR**

- Significant lift capacity of objects and greater dexterity for handling more challenging missions
- Advanced behaviors including both factory and user-defined presets, manipulator rewind, and "fly-the-gripper" mode
- Quick and toolless removal of the manipulator allows for the exchange of future specialized payloads

# **OPERATOR CONTROL UNIT**

- Consists of a ruggedized laptop with game-style controller and optional large, external touchscreen
- Optional tablet-based controller with embedded radio
- Diagnostic and maintenance information is provided via touch screen graphics
- DVR capable





# **TECHNICAL SPECIFICATIONS**

#### Dimensions

- Height: 19" (483 mm)
- Width: 16" (406 mm)
- Length: 25" (635 mm)

#### Weight

• 64 lbs. with 4 articulators

## Mobility

- Slope: 45° incline and 45° stairs
- Speed: 5 mph (8 kph)
- Traverse: Openings up to 16.5" wide
- Turning: Within the length of the vehicle (29" diameter)

## Manipulator

- Variable speed control for precision
- Quick change accessory mounting system
- Torso Rotate: +/- 175°
- Shoulder: 210°
- Elbow: 210°
- Wrist Pitch: +/- 90°
- Grip Rotate: 360° continuous w/feedback
- Gripper: 0-4"
- Gripper Force: 1-45 lbs. (283 kPa)
- · Lifting: 30 lbs. at 6" from robot front; 15 lbs. at full extension
- Vertical Reach: 59" w/arm fully extended
- Horizontal Reach: 45" w/arm fully extended

#### Cameras

- Surveillance
  - Extra low light color pan/tilt/zoom with full 360° continuous pan and 180° tilt
  - · Auto/manual focus and iris
  - · LED lights with remote switching from white to IR
  - Vertical surveillance camera deploy/stow
- Arm
  - · Fixed-color camera with wide angle lens option
- 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
- 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
- · Optional tablet-based controller with embedded radio
- 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

- 330' (100 m) fiber optic cable
- 1W COFDM—no license required
  - 500 m+ line of sight (LOS)
  - 350 m non line of sight (NLOS)
- 5W COFDM—license required
  - 800 m+ LOS
  - 400 m NLOS

## Electrical

- 3 isolated firing circuits: 24VDC
- Power supply: 24VDC
  - 2 BB2590 lithium-ion 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 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



peraton.com/remotec/