

# ANDROS TITUS

## Unmanned Ground Vehicle System

### SMARTER. LIGHTER. FASTER.

Andros™ Titus provides the performance, ruggedness, and reliability expected of a larger Andros vehicle in a smaller package.

The system design is focused on mobility, manipulator dexterity, the user interface, and life cycle costs. While offering excellent initial operation capabilities, the system is designed for growth to keep your investment current well into the future.

### VEHICLE AND CHASSIS

- Features unparalleled performance in sand, snow, and other fine particulates
- Modular design approach allows users to reconfigure the base unit to meet a variety of missions
- Superior stair climbing thanks to the proven Andros dualarticulator design—the culmination of 30 years of extreme use
- 16.25" (41 cm) width (w/articulators) for use on airplanes, buses, and trains
- Vehicle speed 7.5+ mph (12+ kph)
- Quick-swap BB 2590 batteries

### MANIPULATOR

- “Fly the gripper” control for ease of user operation (joint-by-joint control also possible)
- Preset positioning for rapid deployment
- Six degrees of freedom, including torso rotate
- Lifting: 10 lbs (4.5 kg); full extension 20 lbs (9 kg) close to body
- Manipulator can be removed quickly, without tools, to exchange for future specialized manipulators and payloads

### OPERATOR CONTROL UNIT

- Innovative touchscreen/game-style controller
- Main, quad-screen, PIP camera view windows, all resizable and movable on the screen by user
- Thoughtful and easy-to-use approach to the user interface makes operation of the OCU simple



- 3-D avatar illustrates position feedback

### TECHNICAL SPECIFICATIONS

#### Dimensions

- Height: 45" (1143 mm) with antenna
- Width: 16.25" (413 mm) base system; 24.25" (616 mm) with optional wheels
- Length: 28.75" (730 mm) articulators folded; 51.5" (1308 mm) articulators extended
- Reach: horizontal 41" (1 m), vertical 70" (1.8 m)

#### Weight

- 149 lbs (66 kg) base system, including manipulator
- 165 lbs (75 kg) with wheels

## Mobility

- All-terrain with four articulated tracks with position feedback
- Slope: 45° including incline and stairs
- Speed: 0-5+ mph (8 kph) (tracks only); 7.5+ mph (12 kph) with optional wheels
- Turning: 31" (787 mm)
- Traverse: gap opening up to 24" (61 cm) and obstacles up to 18" (46 cm)

## Manipulator

- Quick-release manipulator
- Variable speed control for precision
- Torso Rotate: +/- 180°
- Shoulder: -90° to +135°
- Elbow: +/- 135°
- Wrist : +/- 135°
- Grip Rotate: 360° continuous
- Gripper: 0"- 4" (0-101 mm) open/close
- Gripper Force: 1-45 lbs (283 kPa)
- Lifting: 10 lbs (4.5 kg) at full extension; 20 lbs (9 kg) close to platform

## Cameras

- **Surveillance**
  - Color camera with IR switching 216:1 zoom
  - Pan/tilt/with 360° pan; +/-90° tilt
  - Auto/manual focus and iris
  - LED lights with remote switching from white to IR
  - Optional thermal camera
- **Arm**
  - Color camera with fixed focus and auto iris
  - Integrated white light LED ring
- **Front Drive**
  - Color camera with fixed focus and auto iris
  - Integrated white light LED with IR emitters
- **Rear Drive**
  - Color camera with fixed focus and auto iris

## Audio

- Two-way audio system with weatherproof speaker and microphone

## Communication

- **1W—no license required**
  - 500 m+ line of sight (LOS)
  - 350 m non line of sight (NLOS)
- **5W—license required**
  - 800 m+ LOS
  - 400 m NLOS

## Electrical

- 2 Isolated Firing Circuits: 24VDC
- Power Supply: 4 BB2590 batteries with four-bay charger
- 110 or 220 VAC operation

## Environmental

- Designed to meet IP65

## Other

- Toolless, quick-release wheels
- Recoilless disruptor mount
- Supports various sensors
- 1.5 days of operator/maintenance in Clinton, TN

## CONTACT US

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

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