

ANDROS FX

Unmanned Ground Vehicle System

Andros FX™ was designed with the user in mind, created from the ground up based on more than 30 years of Peraton Remotec unmanned ground vehicle (UGV) experience and guided by customer requirements.

Combining both advanced mobility and high dexterity in one vehicle, the Andros FX provides unmatched capabilities to defeat vehicle-borne improvised explosive devices (IED) in addition to many others—maintaining Andros' global reputation as a rugged, reliable, easy-to-use vehicle.

TRACK-POD MOBILITY

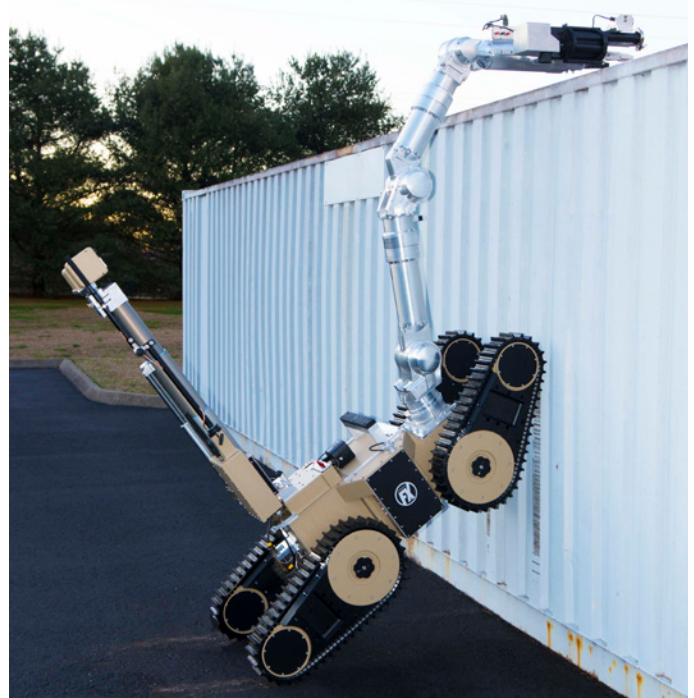
- Quad articulators provide the mobility needed for a wide range of indoor and outdoor scenarios
- Each track pod can be controlled individually to level the vehicle on uneven terrain, increasing the flexibility of employment and minimizing concerns about vehicle tip overs

NINE DEGREES OF FREEDOM MANIPULATOR

- Two additional roll joints provide the ability to access vehicles and maneuver in confined spaces such as parking lots and buildings previously out of reach
- Significantly increased lift capacity of objects and greater dexterity for handling the toughest missions
- Gripper palm camera with lights and range estimator for faster, more accurate grasping

IMPROVED MENU SYSTEM

- 18 factory presets allow for rapid positioning of the arm and articulators
- 3-D vehicle avatar helps operators view and visualize the configuration of the arm and articulators
- One or four cameras can be displayed
- Single camera mode offers three picture-in-picture camera windows that can be moved and resized
- Diagnostic and maintenance information provided via touch screen graphics



TECHNICAL SPECIFICATIONS

Dimensions

- Height: 55" (1397 mm)
- Width: 28" (711 mm)
- Length: 42" (1066 mm) tracks up

Weight

- 1000 lbs. (454 kg)

Mobility

- Articulated tracks with position feedback capable of individual control
- Slope: 45° incline and stairs
- Speed: 0-5 mph (0-8 kph)
- Traverse: gap opening up to 27" (686mm) and obstacles up to 25" (635 mm)
- Turning: 48" (1219 mm)

Manipulator

- Variable speed control for precision
- Dual-sided quick change accessory mounting system

- Torso Rotate: +/-150° w/position feedback
- Shoulder: 221° w/position feedback
- Lower Arm Roll: +/-170° 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" (124 kg at 457 mm); 125 lbs (57 kg) at full extension
- Vertical Reach: 137" (3480 mm) with tracks down and arm fully extended
- Horizontal Reach: 97.5" (2464 mm) from front of vehicle chassis

Cameras

- **Surveillance**
 - Color camera with IR switching
 - 360x zoom
 - Extra low light color pan/tilt/zoom with full 360°continuous pan, +/- 90°tilt
 - Auto/manual focus and iris
 - LED lights with remote switching from LED to iris
 - Vertical Surveillance Camera Extend: 24" (609 mm)
- **Arm**
 - Color camera that switches to B&W in low light conditions
 - LED lights with remote switching from LED to IR
 - 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

- 2000' (610 m) fiber optic cable reel
- 5W—license required

Radio

- 1000 m+ line of sight (LOS)
- 500 m non line of sight (NLOS)

Electrical

- 7 isolated firing circuits: 24VDC
- Power Supply: 36VDC 55 amp-hr gel cell battery pack; battery charger, 110 or 220VAC operation

Environmental

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

Other

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

CONTACT INFORMATION

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

remotecs@peraton.com

865.483.0228