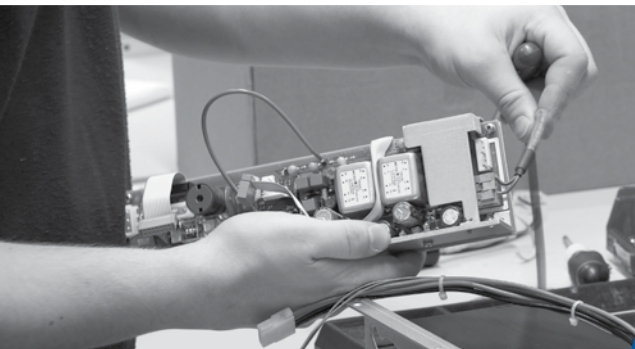
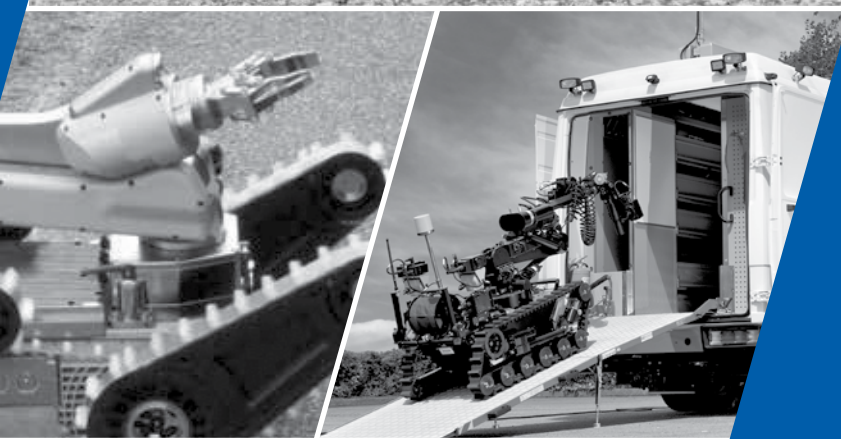




*Remotec  
Andros Titus*



*THE VALUE OF PERFORMANCE.*

***NORTHROP GRUMMAN***

## Smarter. Lighter. Faster. Stronger.

When Remotec introduced Andros™ robots to the EOD community over 25 years ago, we began a revolution in hazardous duty operations and defined an industry. We're proud to begin a new revolution with the introduction of Titus, our all-new, next generation Andros vehicle.

## Vehicle & Chassis

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™ dual-articulator design - the culmination of 25 years of extreme use
- 41cm width (w/articulators) for use on airplanes, buses and trains
- Vehicle speed 12+ kph
- Quick-swap BB 2590 batteries

## Titus Key Features

Incredible new manipulator design with all internal components provides superior capability, in a quick-release, versatile package

Quick-release Pan & Tilt with color 216:1 zoom can be removed with a twist of the wrist for low-clearance areas

Optional Taser & Thermal imager

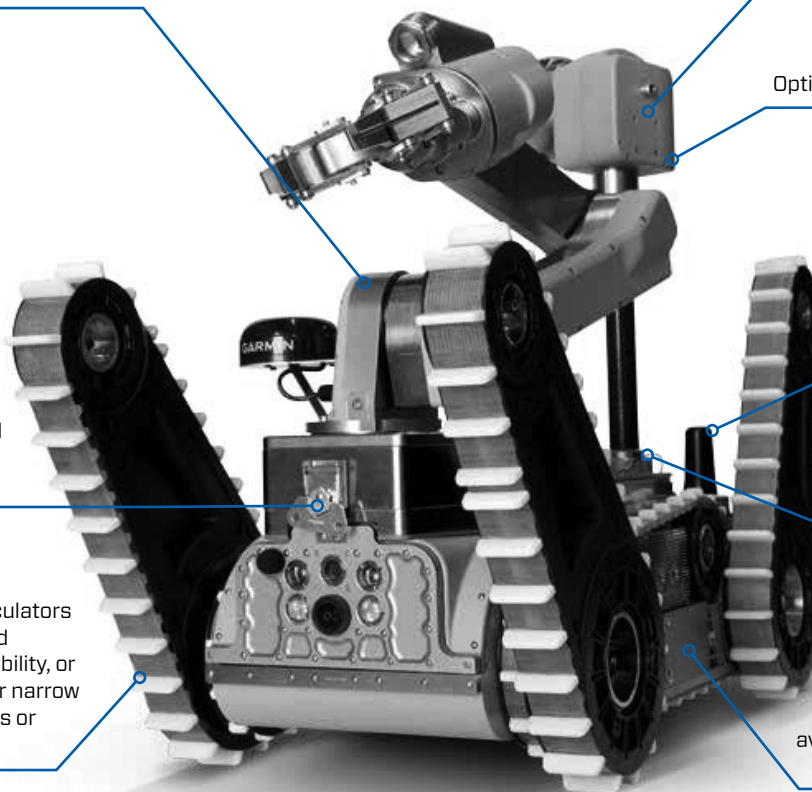
State of the art diagnostics and troubleshooting, including on-board diagnostics LCD screen

Integrated 1W radio for crystal clear audio & video communication

Picatunny rails for sensor & payload attachment

Quick-release articulators provide unmatched stairclimbing & mobility, or can be removed for narrow spaces such as bus or airplane aisles

Widely used & commercially available quick-swap BB 2590 batteries

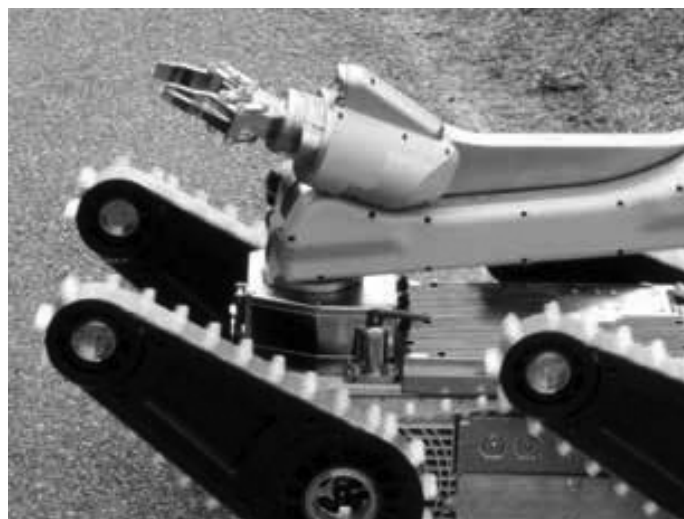


## Manipulator

- “Fly the gripper” control for ease of user operation (joint-by-joint control possible, also)
- Preset positioning for rapid deployment
- 6 degrees of freedom, including torso rotate
- 6.8 kg full extension/9 kg close to body
- Manipulator can be removed quickly, without tools, to exchange for future specialised manipulators & payloads

## Operator Control Unit

- First-of-its-kind touchscreen/physical button hybrid controller
- Main, Quad-screen, PIP camera view windows, all resizable and moveable on the screen by user
- Thoughtful and easy-to-use approach to the user interface makes operation of the OCU a breeze
- 3D real-time, on-screen position feedback



Titus is the most versatile and customisable unmanned ground system we've ever produced. In its most narrow configuration, Titus can easily navigate small aisles such as those found on aircraft and public transportation systems. Quick-connect/release articulators and optional wheels provide increased stairclimbing ability, and true all-terrain mobility.

## Specifications

### Dimensions

<i>Width</i>	0.41m (base system); 0.62m with optional wheels
<i>Length</i>	0.73m (articulators folded); 1.31m (articulators extended)

<b>Weight</b>	61.23kg (base system, including manipulator)
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### Mobility

<i>Slope</i>	45° including stairs
<i>Speed</i>	0 to 8 kph (tracks only); 12+ kph with optional wheels
<i>Turning</i>	Within the length of the vehicle

### Manipulator (Light Duty)

	Quick-release manipulator
	Variable Speed Control for precision
	Control methods:
	- "Fly the Gripper"
	- Joint-by-joint
	- Preset Positioning
	Torso rotate +/- 180°
	Shoulder -90° to +135°
	Elbow +/- 135°
	Wrist +/- 135°
<i>Grip rotate</i>	360° continuous w/feedback
<i>Gripper</i>	0 to 10.1cm open/close; 0-20.4kg pressure
<i>Lifting</i>	6.8kg at full extension; 9kg close to platform

### Cameras

<i>Surveillance</i>	Colour camera with Night Vision (IR) switching 216:1 zoom Pan/tilt/with 360° pan; +/-90° tilt Auto/Manual Focus and Iris White Light/IR LED illumination
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<i>Arm</i>	Colour camera with fixed focus Auto Iris
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<i>Front Drive</i>	Integrated white light LED ring Colour camera with fixed focus Auto Iris
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<i>Rear Drive</i>	Integrated white light LEDs Colour camera with fixed focus Auto Iris
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<b>Audio</b>	2 Way Audio System with weatherproof speaker and microphone
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<b>Environmental</b>	IP65
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<b>Power</b>	BB2590 Batteries 3 hour continuous driving run-time
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<b>Operator Control Unit</b>	Advanced Software/Graphical User Interface
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	Cabled, hand-held control unit with color touchscreen & integrated tactile controls 8.4" Daylight readable screen Xbox-style controller 2-way audio PTT Speaker/Mic
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<b>Communication</b>	1W COFDM, No License Required (NLR) 700m+ Line of Sight (LOS) 300m Non-line of sight (NLOS)
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<b>Optional Accessories</b>	Toolless, quick-release wheels Thermal imager Taser mount (X26) Recoilless disruptor mount GPS sensor
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## Titus Operator Control Unit

Titus is even more powerful as a platform thanks to a completely re-imagined operating system that makes operation simple, efficient, and—dare we say—fun. Integrating physical control buttons and an 8.4” multi-touch screen, the Titus OCU makes launching presets, flying the gripper, and other formerly complicated tasks feel like child’s play.

## Ease of Use

In redesigning the user experience for , the most commonly used functions were made easily accessible, and simple to use via convenient touch screen controls that are always in reach. No more getting lost in complex menus.

## Plug-and-Play Payloads

The Operating System was designed to make interacting with sensors & other payloads as intuitive as possible. When a sensor has something to tell you, its appearance will change to alert you.

## Important Information Up Front

In addition to plugin alerts, an interactive 3D vehicle model provides real-time position feedback, and a system status area keeps users informed of critical information such as battery life, communications status and drive mode.

## Custom Viewport

Choose from single view, quad-screen, or multiple “floating” picture-in-picture screens, all easily resizable with a simple touch.

For more information, please contact

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