

Find the best equipment to clean your ducts

Articulated Nimble Adaptable Trunk



ANATROLLER[™] ARI-100

Developed by Robotics Design Inc. CANADA

The **ANAT**ROLLER[™] **ARI-100** features a high level of robustness and cross-functional capabilities, which allows it to operate it hazardous environments. This robot excels at operations in confined spaces, and is also excellent at remote visual inspection.

The **ANAT**ROLLER[™] **ARI-100** is a heavy duty modular mobile robot with a symmetrical design which allows it to continue operating after a flip-over.

The robot is composed of a main module constituting the central body, and a second module rotating around it with an angle varying from -90° to 90° which contains the lighting, camera and air pistol. This module allows the robot to remotely change its shape in order to climb slopes of 45° and obstacles of 5" and move on rough or uneven terrain.

Each module is composed of one block of anodized aluminum, which increases the structural robustness and rigidity of the robot. The **ARI-100**[™] can move using wheels or treks. The **ANAT**ROLLER[™] **ARI-100** includes an articulated arm that can move in all directions and can support many types of accessories and add-ons.

Weighing only 8kg, this innovative robot is able to carry a maximum payload of 50kg and tow 45kg, rendering it the most powerful portable mobile robot on the market.

This robot is also resilient to the industrial environment, and its performance is unaffected by oil, dust and water.

The robot control was made to be as simple as possible, and this user-friendly robot allows users with little training to control it with ease.

Robotics Design Inc. is able to customize the **ANAT**ROLLER™ **ARI-100** in many ways to suit applications such as HVAC cleaning, building foundation inspection, security and EOD (Explosive Ordinance Disposal), search and rescue, aqueduct and sewer inspection and much more.

This product is protected by US and Canadian patents and other international patents pending.

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The modular architecture of the **ANAT**ROLLER[™] **ARI-100** allows users to add or remove modules, accessories and arms to the central body. Maintenance is also simple and inexpensive, as individual modules can be repaired or replaced without disrupting the rest of the system.

The robot control system is easy to operate, with a single joystick controlling movement, and a second to manipulate accessories. Users have complete control of robot speed. The arm's orientation is controlled using a sensitive control that follows the exact operator hand-motion.

The lighting system is equipped with fixed and variable luminosity control. Undesirable reflections and excessive brightness are eliminated using appropriate white lightings.

The robot, robot control system, accessories and video screen (touch screen optional) are stored in a rugged carrying case for easy transportation and to prevent damage to the system.

Advantages

- Symmetric compact modular design;
- Anti tilting robot;
- Light weight;
- Remotely change shape;
- Zero- radius turn;
- Climbing obstacles;
- Grad UP to 45 deg;
- Transport payloads;
- Resist on vibration and industrial environment;
- Water resist (optional);
- Low Maintenance;
- Simple control;
- PWM control;
- PID Control;
- Possibility to add manipulator arm;
- High quality precision machined;
- Custom ordered.





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ANATROLLER[™] ARI-100

Length	11.5 (in)
	5.0 (in)
Width (large wheels)	8.5 (in)
(small wheels)	7.0 (in)
Weight	8 kg
Speed	0 to 2 feet/s
Grad up to	45°
Climbs obstacles up to	5 in
Module 2 rotation	± 90°
Climbs obstacles up to Module 2 rotation Voltage	110/220 AC
	50/60 Hz
Power consumption	Max 300W
Operating temperature	0 to 50°C
PWM control	YES
PID control	YES
Cable (standard)	100 feet
Camera 1	Rotates 180°
Number of pixels Resolution Usable illumination Video output	NTSC
	512(H) x 492(V)
	PAL
	512(H) x 582(V)
Resolution	380 TV Lines
Usable illumination	1.0 Lux at F=1.2
Video output	1.0Vpp, 75 ohm
Lens	3.6 mm
Audio	More than 35db
Camera 2 (Optional)	Rotates 360°
ite lighting (brightness reduction)	7 High intensity LED
pressure	>100 psi
ing (in) L x W x H	25.0 x 20.0 x 10
eo output RCA	4 camera
lio output (optional)	1
urity key (only authorized	YES
sonnel can operate the robot)	
input	Plug in
al Weight with casing	22 kg
ling articulated arm	YES
	Height Width (large wheels) (small wheels) Weight Speed Grad up to Climbs obstacles up to Module 2 rotation Voltage Power consumption Operating temperature PWM control PID control Cable (standard) Camera 1 Number of pixels Resolution Usable illumination Video output Lens Audio Camera 2 (Optional) itte lighting (brightness reduction) pressure ing (in) L x W x H eo output RCA lio output (optional) urity key (only authorized sonnel can operate the robot) input al Weight with casing