

JACKAL™

UNMANNED GROUND VEHICLE



**SMALL. FAST. RUGGED.
DRIVE RESEARCH FORWARD**



READY TO GO RIGHT OUT OF THE BOX

With an on-board computer, GPS and IMU fully integrated with ROS, Jackal has out-of-the-box autonomous capability. With wireless connectivity via Blue-tooth and WiFi, Jackal is ready to go as soon as you turn it on!

MADE FOR THE GREAT OUTDOORS

Jackal's chassis is made entirely from welded aluminum and provides IP65 protection when the main bulkhead is sealed (optional). The high torque 4x4 drivetrain gives Jackal maximum traction, with enough on-board power available to traverse obstacles or unconsolidated terrain.

SMALL SIZE, BIG CAPABILITY

Swap payloads off Jackal's customizable mounting plate. As with all Clearpath robots, Jackal is compatible with many robot accessories to quickly expand your research and development. Additionally, users receive end-to-end visibility of Jackal's operation with the comprehensive ROS API.

A FEW OF THE INNOVATIVE FIRMS WHO USE OUR ROBOTS



Massachusetts
Institute of
Technology

UNIVERSITY OF
WATERLOO

Carnegie
Mellon
University



Georgia Institute of
Technology



UNIVERSITY OF
TORONTO



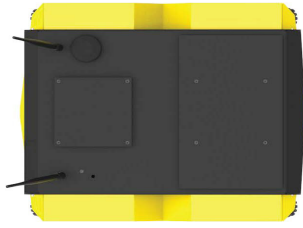
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Contact us today for pricing and a free 30 minute technical assessment: **1-800-301-3863**

TECHNICAL SPECIFICATIONS



TOP



SIDE



FRONT



DIMENSIONS L x W x H	508 x 430 x 250 mm 20 x 17 x 10 in	OPERATING TIME	2 hrs maximum 8 hrs typical	COMMUNICATION	Ethernet, USB 3.0, RS232, IEEE 1394 avail.
WEIGHT	17 kg 37 lb	DRIVE POWER	500 W	DRIVERS/APIs	Packaged with ROS Kinetic, Mathworks
PAYLOAD A: all terrain; B: maximum	A: 10 kg / 22 lb B: 20 kg / 44 lb	BATTERY	270 Watt hours Lithium Ion	CONTROL MODES	Open-loop Wheel Velocity Kinematic Commands
MAXIMUM SPEED	2.0 m/s 6.6 ft/s	ENCODERS	78,000 pulses/m Quadrature	FEEDBACK	Battery+Motor Current Wheel Velocity Integrated GPS, Gyroscope and Accelerometer
CLEARANCE	65 mm 2.6 in	USER POWER	5V @ 5A 12V @ 10A Vbat (24V Norm) @ 20A		

SAMPLE APPLICATIONS

MULTI-ROBOT SYSTEMS



Jackal is engineered with a **scalable** and **open architecture** making it the ideal platform for testing and developing multi-robot systems.

PERCEPTION & NAVIGATION



Get your research rolling faster with **camera, GPS** and **laser packages**, all of which include documented libraries and programming examples.

LAB TEACHING TOOL



Jackal is **lightweight, compact** and **easy to program** - the perfect platform to help build courseware that students will be excited about!

ENVIRONMENTAL MONITORING



Configure Jackal for **teleoperation** or **autonomy** in **outdoor applications**. The weatherproof, rugged chassis makes it ideal for environmental monitoring.

CONTACT US FOR MORE INFORMATION

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