

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



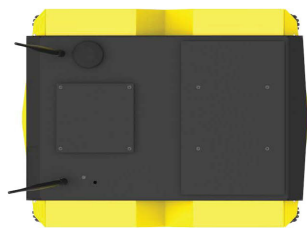
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Contact us today for pricing and a free 30 minute technical assessment: **1-800-301-3863**

TECHNICAL SPECIFICATIONS



TOP



SIDE



FRONT



DIMENSIONS
L x W x H 508 x 430 x 250 mm
20 x 17 x 10 in

WEIGHT
17 kg
37 lb

PAYLOAD
A: all terrain; B: maximum
A: 10 kg / 22 lb
B: 20 kg / 44 lb

MAXIMUM SPEED
2.0 m/s
6.6 ft/s

CLEARANCE
65 mm
2.6 in

OPERATING TIME
2 hrs maximum
8 hrs typical

DRIVE POWER
500 W

BATTERY
270 Watt hours
Lithium Ion

ENCODERS
78,000 pulses/m
Quadrature

USER POWER
5V @ 5A
12V @ 10A
Vbat (24V Norm) @ 20A

COMMUNICATION Ethernet, USB 3.0,
RS232, IEEE 1394 avail.

DRIVERS/APIs Packaged with
ROS Kinetic, Mathworks

CONTROL MODES Open-loop
Wheel Velocity
Kinematic Commands

FEEDBACK Battery+Motor
Current Wheel Velocity
Integrated GPS,
Gyroscope and
Accelerometer

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.

Génération ROBOTS

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