RIDGEBACK™
OMNIDIRECTIONAL DEVELOPMENT PLATFORM

CLEARPATH ROBOTICS™

3 DEGREES OF MOVEMENT

Ridgeback is a midsize indoor robot platform that uses an omni-drive to move manipulators and heavy payloads with ease. The omnidirectional base provides precision positioning in dynamic environments and comes fully integrated with an onboard computer, front and optional rear laser scanners and an IMU.

ROS READY

Programming complex applications is simple with the open-source Robot Operating System (ROS). Ridgeback is supported in Gazebo Physics Simulator, RViz and MoveIT! Motion planner.

EASY INTEGRATION

As with all Clearpath robots, Ridgeback is plug-and-play compatible with our extensive list of robot accessories. Payloads are easily added with flexible mounting, accessible on-board power and reconfigurable I/O. Prototyping an industrial or commercial mobile robot has never been easier.

A FEW OF THE INNOVATIVE FIRMS WHO USE OUR ROBOTS

Massachusetts Institute of Technology · UNIVERSITY OF WATERLOO · Carnegie Mellon University · Georgia Institute of Technology · Cal · UNIVERSITY OF TORONTO · WPI

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	960 x 793 x 311 mm (37.7 x 31.1 x 12.2 in)	**DRIVE POWER**	2000 W peak 800 W continuous	**FEEDBACK**	Encoders Onboard IMU
WEIGHT	135 kg (297 lbs)	**BATTERY**	24 V 100 Ah AGM Battery	**CONTROL MODES**	Kinematic Control (Forward, Sideways, Rotation), Indivdual Wheel Velocities
PAYLOAD	100 kg (220 lbs)	**USER POWER**	5 V / 12V / 24V FUSED @ 10A each		
MAXIMUM SPEED	1.1 m/s (3.6 ft/s)	**COMMUNICATION**	Ethernet, USB 3.0, RS232,		
OBSTACLE CLEARANCE	18mm (0.7 in)	**INCLUDED ACCESSORIES**	Onboard Computer, Laser, Gyroscope	**DRIVERS/ APIs**	Packaged with ROS Melodic, GAZEBO, Navigation Support MOVEIT!
OPERATING TIME	15 hrs with max payload	**ENCODERS**	1 per wheel, >250,000 Counts Per Meter		

SAMPLE APPLICATIONS

MOBILE MANIPULATION

Integrate UR-5, Kinova, or other manipulators with Ridgeback. Omnidirectional steering allows precise positioning without having to back away from the work space.
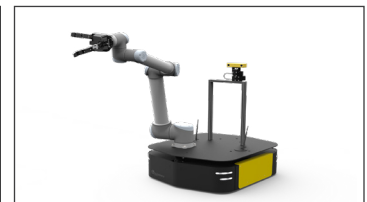
HUMAN-ROBOT INTERACTION

With their modular design, our robots can be outfitted with various manipulators and vision sensors for human-robot interaction and collaboration.

MATERIALS TRANSPORT

Ridgeback is ideally suited to prototype factory applications. Front and rear laser mounts provide 360 degree coverage for safety, while on-board WIFI provides connection with facility infrastructure.

PERCEPTION & NAVIGATION

Improve state estimation with tunable vehicle control parameters, high-resolution wheel odometry and full power system diagnostics.

CONTACT US FOR MORE INFORMATION

Clearpath Robotics Inc.
1425 Strasburg Road, Unit 2A
Kitchener, Ontario
N2R 1H2, Canada

TEL: 1-800-301-3863
FAX: 1-888-374-0091
@: info@clearpathrobotics.com
WEB: www.clearpathrobotics.com

Don't forget to find us online: