RIDGEBACK[™]



Omnidirectional Development Platform



3 DEGREES OF MOVEMENT.

Ridgeback is built to industrial standards to move manipulators and heavy payloads with ease. Omnidirectional "Swedish" wheels provide control for forward, lateral and twisting movement. Ridgeback enables precision positioning in a constrained environment.

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.

Ridgeback is designed for rapid integration with the Baxter research platform - plug it in and go! Other sensors and payloads are easily added with flexible mounting, accessible onboard power and reconfigurable I/O. Mobile robot prototyping is fast and easy with Ridgeback.

A FEW OF THE INNOVATIVE FIRMS WHO USE OUR ROBOTS















TECHNICAL SPECIFICATIONS





DIMENSIONS L x W x H	960 x 793 x 296 mm (37.7 x 31.1 x 11.6 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), INDIVIDUAL 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,	DRIVERS/ APIs	PACKAGED WITH ROS INDIGO, GAZEBO, NAVIGATION SUPPORT MOVEIT!
OBSTACLE CLEARANCE	18mm (0.7 in)	INCLUDED ACCESSORIES	ONBOARD COMPUTER, LASER, GYROSCOPE		
OPERATING TIME	15 hrs with max payload	ENCODERS	1 per wheel, >250,000 COUNTS PER METER		

SAMPLE APPLICATIONS

MOBILE BAXTER BASE

MOBILE MANIPULATION

MATERIALS TRANSPORT

PERCEPTION & NAVIGATION



Available on-board inverter and mounting kit make it easy to plug in and go. Integrating the Baxter research platform takes just 15 minutes.



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



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.



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

CONTACT US FOR MORE INFORMATION

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