

TURTLEBOT™

PERSONAL ROBOTICS PLATFORM



**WORLD CLASS
RESEARCH IN AN
OPEN SOURCE
HOBBY PLATFORM.**



DEVELOPED IN PARTNERSHIP WITH:



POWERFUL STARTER KIT OUT-OF-THE-BOX.

An open-source SDK based on ROS integrates all the software you need to get TurtleBot running and comes with built-in advanced capabilities like mapping and navigation to help you develop applications right out of the box.

BUILT ON OPEN-SOURCE AND COMMUNITY.

Thanks to the creativity and support of the ROS community, there are thousands of software packages for robotics you can use with Turtlebot. Tap into powerful computer vision libraries like OpenCV and PCL, find drivers for add-ons, and test advanced research algorithms.

INCREDIBLE PRICE AND PERFORMANCE.

TurtleBot comes with powerful lowcost hardware to give you a capable, autonomous platform for developing robot applications. Yujin's Kobuki, Xtion, netbook, and gyro are all seamlessly integrated to provide amazing capabilities for an incredibly affordable price.

A FEW OF THE INNOVATIVE FIRMS WHO USE OUR ROBOTS



Available for purchase online: store.clearpathrobotics.com, or call us at: 1-800-301-3863

TECHNICAL SPECIFICATIONS



MOBILE BASE and POWER BOARD

Platform: Yujin Kobuki
 Battery: Up to 4400 mAh Ni-Ion
 User Power: 5 V and 19 V at 1 A
 12 V at 1.5 A
 12 V at 5 A

TURTLEBOT HARDWARE

Mechanical: Mounting Hardware
 TurtleBot Structure
 Module Plate with 1 inch Spacing Hole Pattern
 Electrical: Modified Kinect Cable for Kobuki power access.

ON-BOARD 3D SENSING

Sensor: ASUS Xtion PRO
 Specs: 640x480 @ 30 frames/sec
 Range: 0.8m - 3.5m
 Gyro: 110 degrees/second Factory Calibrated

ON-BOARD NETBOOK

Processors: Intel Core i3-4010U
 Memory: 4 GB
 Internal HDD: 500 GB
 Connectivity: USB 2.0, USB 3.0, WiFi, Ethernet, VGA, HDMI, SD card

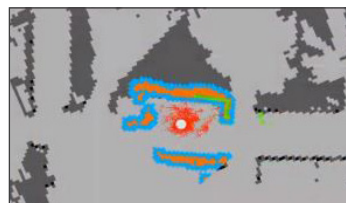
SAMPLE APPLICATIONS

MULTI-ROBOT SYSTEMS



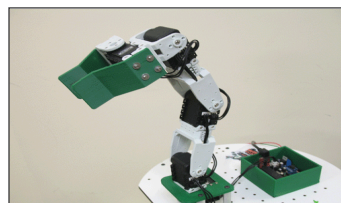
The low-cost Turtlebot is designed with the **scalable open-source ROS architecture** making it an ideal platform for testing and developing complex multi-robot systems on a tight budget.

PERCEPTION & NAVIGATION



Advanced autonomous navigation using **Simultaneous Localization and Mapping (SLAM)** software packages are freely available to integrate with your Turtlebot.

MOBILE MANIPULATION



Turtlebot can easily **interface with a low-cost 4-DOF hobby manipulator** for tele-operated or autonomous manipulation tasks.

TELE-OPERATION



Turtlebot comes ready for tele-operation **out-of-the-box**. Plug in your favourite wireless joystick and get started driving your Turtlebot in minutes.

CONTACT US FOR MORE INFORMATION

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