



PAL Robotics Tiago

Service robot on mobile base, designed to work in indoor environments. Laser range-finder and mapping and localization in unstructured indoor environments. People aware multi-sensor navigation. Obstacle avoidance. Front RGB-D camera for object recognition and pose estimation, face detection & recognition, people detection. Multilanguage text-to-speech & speech recognition. Remote control with tablet. Telepresence and teleoperation. Pick & place with grasping and dexterous 7 DoF manipulator, with lead-through and force sensing. Interchangeable end-effector with force-torque sensing. Large workspace: from ground level to 1.5 m



Key Features

- Autonomy: 1 battery, 4 – 5h
- CPU: Intel i5, 4 Gb RAM
- Compatible OS: Ubuntu LTS 64-bits, ROS LTS
- Programmable using Python, C++, Java, MATLAB
- Two HD cameras, four microphones, sonar rangefinder, two infrared emitters and receivers, inertial board, nine tactile sensors, eight pressure sensors

Possible Applications

- Mobile robot studies
- Robot vision and gesture studies
- Telepresence and remote robot operation
- ROS based robot programming

Access information

Corresponding infrastructure	University of the West of England Bristol Robotics Laboratory
Location	Coldharbour Ln, Stoke Gifford, Bristol BS16 1QY, UK
Unit of access	Working day



Technical specifications

DoA	7
Interface	Ethernet, Wi-Fi, Bluetooth
Arms Payload	3 kg
Weight	70 kg
Height	110 – 145 cm

Additional information

Additional information available [here](#).