

Modules

robuLAB 10

Indoor research and service robot



Introduction

robuLAB 10 is a multi-purpose mobile robot designed to embed various “application modules”. The robuLAB10 is thus a generic base plate (platform) industrialized to be manufactured in great quantity and will be used for all the possible applications thanks to the addition of the various modules “trade” orientated. The first applications concerned are focussed on professional services in sites welcoming mass public like the museums, the hospitals, the road stations, the campuses but also on services providers in public transport, cleaning, security and health. In the second time, the applications will be directed towards domestic services.

Applications

- > Robotic research developments
- > Surveillance
- > Tele-presence
- > Entertainment / Education
- > Cleaning
- > ...



Features

- > Manual remote control by joypad
- > Teaching by showing missions
- > Wire or laser guidance
- > Obstacle detection
- > Compliant with EC machinery directive



Controlled by robuBOX®

Developed and compatible with Microsoft® Robotics Studio, the robuBOX®-AGV implements all the basic functions needed by most of Automatic Guided Vehicles such as : service orchestration, management and abstraction of hardware and sensors, guidance by inductive wire or laser, anti-collision, beacon detection and localization, path teaching-and-repeating, fleet supervision, remote control (by phone)... The robuBOX®-AGV can be customized using Microsoft® Robotics Studio.



Main technical features

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| <ul style="list-style-type: none"> > Platform > dimensions : 450 x 400 x 243 (L x W x H) > payload : 30 kg > weight : 20 kg, including batteries > max speed : 4 m / s > front + rear ultrasonic sensor ring > 4 lead sealed batteries (12 V, 9 Ah) | <ul style="list-style-type: none"> > robuBOX® > From celeron 600 Mhz to pentium M 1,4 Ghz > 512 Mb - 2 to 4 Gb Compact Flash > 1 x I2C + 1 x Ethernet RJ45 > 1 x RS 232, 2 x USB > digital I/O |
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Product specifications are subject to change without notice

Modules

RobuLAB 80

Indoor Automated Guided Vehicle

Options



>With a weight of 3 Kg, the Katana 400s is a 6 DOF robotic manipulator designed to be embedded on mobile platforms. Seamlessly integrated on robuLAB 10, this arm with up to 500g payload is particularly accurate, and allows very precise 3D positioning (0,01° in space).



>URG-04LX Scanning Laser Range Finder, the best optimized sensor for environment recognition. Suitable for next generation intelligent robots with an autonomous system and privacy security.



>The CMUcam3 is an ARM7TDMI based fully programmable embedded computer vision sensor. It is targeted toward users that are already familiar with basic image processing and who are comfortable with microcontroller programming and gives the ability of advanced users to directly program the system with their specific algorithms.



>This pan-tilt monocular color IP vision system provides any Robosoft's robots with a low cost vision system, with high quality imaging capabilities, allowing developers to easily set tracking, surveillance or monitoring applications.



>This docking station will charge your robot when needed and provide for a safe place home for your robot.



>Today's most robust WiFi a/b/g server + client integrated devices enabling reliable wireless operations.

