



Keylo : Service robot for clients and visitors

Keylo is a service robot designed to help operators of public spaces to receive and serve clients autonomously or remotely.





Perfect finish



Obstacles avoidance



Enhanced security



Retailers, stores and showrooms

Serve clients in multiple sites from one single place using Keylo's tele-presence features. Use the camera to capture the video of the transaction. Display forms on the 24" touchscreen to process clients assessment remotely. Combine your website and your physical store using Keylo.



Advertisement

Display advertisements on the 24" touchscreen while Keylo meets autonomously the visitors. Adapt your special offers to the clients' geolocation



Security

Use the tele-presence feature to assess security issues. The robot goes autonomously to the place an alarm is triggered. Capture video and take pictures of the area.



Guidance

Help visitors to find their way using the Follow Me feature. Keylo maps each site and is able to define a destination, the most effective path and to avoid safely obstacles and people.



Easy maneuverability on uneven grounds

Keylo's suspensions have been designed to cross door thresholds.
Keylo can easily enter an elevator without human assistance.
The center of gravity is located just above the wheels for more stability.



Low circular footprint
52cm of diameter



Total height : 164cm
Low centre of gravity



Run time : 2 to 6 hours
with basic battery pack



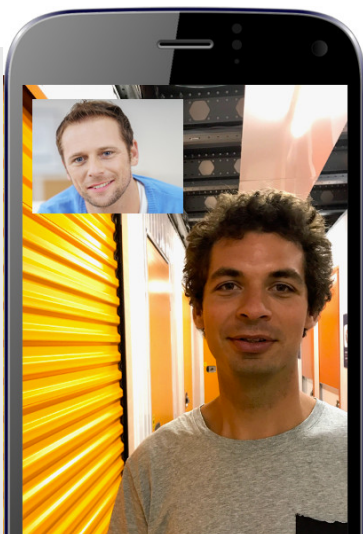
Docking station included



Easy hull opening and
access to components
(3 screws)



Ubuntu 16.04 LTS, ROS
Kinetic Kame and standard
ROS API



Control the robot remotely from your smartphone

As soon as a visitor touches Keylo, receive a notification on your smartphone and reply using the 2-way video.

No need to be in front of your computer to take calls from your facility!



Detailed Specifications

Computer (by default, can be upgraded)

- ✓ Intel NUC615SYH
- ✓ CPU: Intel® Core™ i5-6260U, up to 2.9 GHz - 4 threads - cache 4 Mo
- ✓ GPU: Intel Iris Graphics 540
- ✓ Memory: 16 Go DDR4
- ✓ Storage: 120 Go SSD
- ✓ Connectivity: 4 x USB 3.0, Wifi 2x2 Band 2.4 GHz / 5 GHz, Bluetooth 4.2, 1 x Gigabit ethernet
- ✓ TDP: 15W

USB extension

- ✓ Powered Hub 10 x USB 3.0

Screen

- ✓ 24" multi-points high FOV touchscreen, USB and HDMI plug-and-play interface on Linux and Windows platforms

Audio

- ✓ Speakerphone Jabraspeak 510, USB plug-and-play interface on Linux and Windows platforms

Batteries

- ✓ Standard AGM battery pack 2 x 12 V-33Ah, easy to replace and upgrade

Auxiliary power

- ✓ Stabilised output 5 and 12 VDC
- ✓ Direct battery output 22-25 VDC

LED strip

- ✓ Fully reprogrammable RGB LED strip. USB interface

Software

Keylo comes ready to run with its computer preconfigured, Ubuntu 16.04 LTS, ROS Kinetic Kame and a standard ROS API (service/topic) to all its sensors and features. The users are free to format and configure the computer as they wish. A restore factory settings USB key is provided.

Drive system

- ✓ Suspended, turn in place, differential drive design
- ✓ Can cross gaps 4cm long and 1.5cm high thresholds with no inertia
- ✓ Motors controller: Ion Motion Roboclaw 2x30A, USB interface, serial protocol, multi-platform drivers available. Wyca provide a ROS node with a standard odometry and velocity command API
- ✓ Wheel encoders: 3893 ticks/m
- ✓ Max speed: 2 m/s
- ✓ Operation environment: indoor

Sensors

- ✓ 2 x front and rear 3D RGB-D camera Intel Realsense R200: Pointcloud, IR and RGB streams. USB 3.0 interface. ROS API
- ✓ 1 x HD wide angle RGB camera. USB 2.0 interface. ROS API
- ✓ 2 x 4 front and rear ultrasonic range sensors: 5 meters range. ROS API
- ✓ 2 x 2 IR edge detectors. Hard-wired to the motors controller. ROS API
- ✓ 1 x emergency stop push button. Hard-wired to the motors controller. ROS API
- ✓ Lidar:
 1. Standard: Hokuyo URG-04LX-UG01, 5.6 meters range, FOV 240°. ROS API
 2. Upgraded option: Pepperl+Fuchs OMD30M-R2000-B23-V1V1D-HD-1L, 30 meters range, FOV 360° limited to 240° by the robot hull. ROS API

Additional features

- ✓ Item dispenser
- ✓ Lockable box
- ✓ More on special request: printer, bank terminal, etc...