



## Enhancing people's quality of life with service robotics

PAL ROBOTICS has more than 16 years of experience in developing robots for industry and research needs, including autonomous mobile robots. With clients in more than 30 countries, our mission is to enhance people's quality of life through service robotics and automation technologies.



### Specifications

#### GENERAL FEATURES

- Dimensions**  
540 x 300 mm
- Weight**  
40 kg
- Payload**  
Max. 100 kg
- Speed**  
Max. 1.5 m/s
- Ground clearance**  
23 mm
- Laser**  
1x 25 m

#### CONNECTIVITY

- Display**  
1x Tactile control display
- LED**  
2x stripes
- Audio**  
1x Speaker
- General Purpose Digital I/O:**  
5x GPIs and 5x GPOs
- Wireless connectivity**  
WiFi 6 (802.11 ax)  
Bluetooth 5.2

#### ELECTRICAL FEATURES

- Batteries**  
2x 36 V 20 Ah Li-Ion
- Charging**  
5 hours complete recharge
- Battery autonomy**  
12 hours continuous use

#### ACCESSORIES

- Dock station**  
Automating charging
- Positioning station**  
Accurate positioning

#### EXPANSION CAPABILITIES

- USB**  
2x USB 3.0  
3x USB 2.0
- Ethernet**  
2x GigE
- Optional**  
2x channel CAN bus
- Power supply**  
36 V / 10 A

We operate under the European Machine Directive 2006/42/CE

ISO/TS 15066:2016: Robots and robotic devices  
Collaborative robots  
ISO 13482:2014: Robots and robotic devices  
Safety requirements for personal care robots  
ISO 13850:2015 Safety of machinery  
Emergency stop function  
ISO 13849-1: Safety of machinery  
Safety-related parts of control systems - Part 1: General principles for design  
EN 61000-6-2: Electromagnetic compatibility (EMC)  
Part 6-2: Generic standards - Immunity for industrial environments  
EN 61000-6-4: Electromagnetic compatibility (EMC)  
Part 6-4: Generic standards - Emission standard for industrial environments  
EN 60204-1: Safety of machinery  
Electrical equipment of machines -- Part 1: General requirement



## Industry

## TIRAGO<sup>®</sup> BASE

The autonomous mobile solution designed to improve your productivity and reduce your costs.

### Contact us

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# TIAGo® BASE

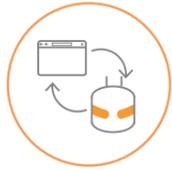
## Autonomous mobile solution

Designed to improve productivity and reduce costs. TIAGo® Base is adaptable and is suitable to be tailored to any intralogistics needs in industry 4.0, healthcare, commercial or indoor public areas. Ready to deploy and automate your indoor transportation.



### FLEXIBLE / CONFIGURABLE

TIAGo® Base has diverse configurations and add-ons to suit any of your needs such as conveyor, lifts, shelves with Vision and stackable boxes. TIAGo® Base is totally customizable following your business requirements.



### SMART

Effortlessly coordinate, monitor and control your robots. Change your robots' tasks on the go, either through our web GUI or via your ERP system. The robot is designed to be controlled via your desktop, phone or tablet. TIAGo® Base is able to connect to your applications.



### SAFE

Thanks to its multi-sensor safety system TIAGo® Base optimizes workplace safety and productivity at the same time, autonomously navigating around people and other obstacles in the robot's path while calculating the best route.

## How TIAGo® Base helps

### Discover the advantages



### Visual Programming

Create and modify new tasks and workflows effortlessly without any coding needed. The user-friendly interface simplifies the integration and re-programming efforts boosting system flexibility.



### Autonomous Navigation & Charging

Easily deployed keeping your space as it is thanks to the advanced autonomous navigation: TIAGo® Base finds the path to diligently handle your deliveries, guaranteeing safety around people and equipment.



### Fleet management

Change tasks and configurations as you go. Centralized monitoring of real time status, location and routes along with current and pending tasks for easier prioritization and control. Available REST-API for ERP implementation.



### Fast deployment

TIAGo® Base is effortlessly deployed within a day. The robot fits into any environment and is able to use ramps and elevators as well as manoeuvring in narrow spaces. The robot adapts easily to floor layout or process change.



#### TIAGo® Base

Ready to be integrated into any process thanks to its mechanical interface, its electrical & communications panel and its wireless capabilities.



#### TIAGo® Delivery

Safe transportation of goods protected by authentication using password or NFC cards. Integrated touch screen to improve HRI.



#### TIAGo® Actuated Conveyor

Suitable to transfer loads automatically with space below for an additional manual load. Manual regulable height.



#### TIAGo® Static Roller

Able to transfer the load by fixed conveyors and transport it anywhere.



#### TIAGo® Shelf

Adjustable shelf with vision add-on with 2x depth cameras to increase safety and improve obstacle avoidance.



#### TIAGo® Stackable boxes

Configuration for European boxes. Add-on vision to increase safety and improve obstacle avoidance.