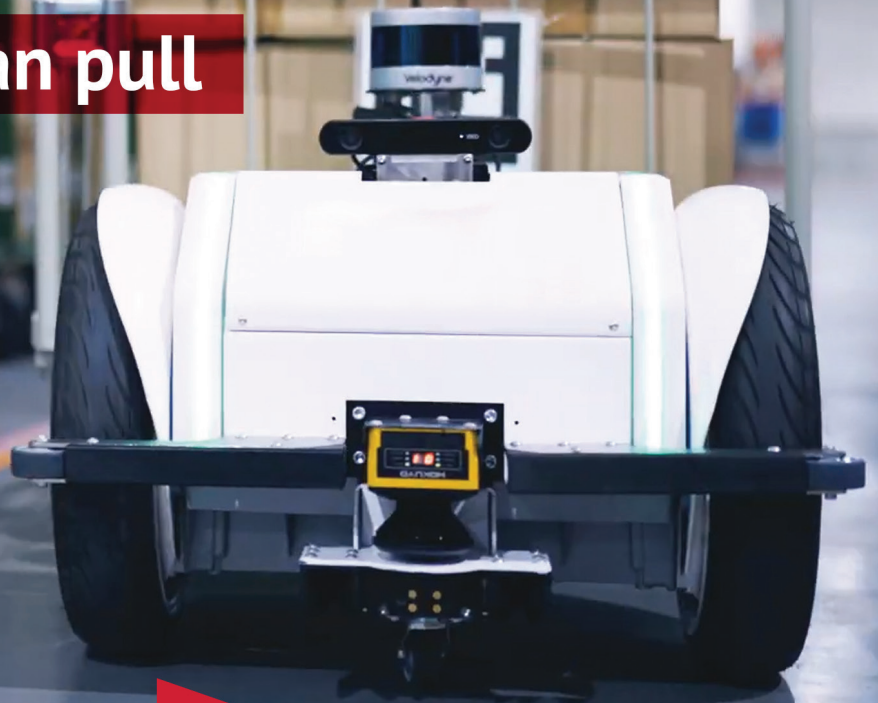# World`s only AMR that can pull any cart

TUGBOT

The Perfect Solution For Intra-Logistics Processes

Introduction

TUGBOT is an intelligent, safe, stable, flexible and precise AMR (autonomous mobile robot) designed to help companies of all sizes on their intra-logistics processes by optimizing workflows, freeing staff to perform added value tasks, increasing productivity and reducing costs.

Utilising a range of flexible mechanical grippers **TUGBOT** enables the automation of manual material handling processes by attaching seamlessly to a wide range of wheeled vehicles commonly used in the intra-logistics field with no modification required on the existing cart.

TUGBOT can perform its assigned tasks autonomously or semi-autonomously, being able to autonomously navigate along complex paths through changing environments with minimal human guidance.

See more at **tugbot.com**
Got any question? **info@tugbot.com**

Product Details

Collaborative autonomous mobile platform
2 motorized + 2 castor wheels for low mounted payloads
Pulls any wheeled payload

Dimensions

741 × 640 × 463 mm (LxWxH)

Weight

45Kg (without gripper)

Max Pull Force

300 Kg

Max Incline

5°

Operation Environment

Indoor

Attachments

Mechanical tow hook adjustable to any cart

Battery

Wheels
Li-Ion 55V/650Wh
Sensors and Control
Li-Ion 12V/240Wh

Battery Life

Up to 5h

Charging Time

0% to 100% - 2:30h

PC

Intel core i5 3.0GHz
16Gb DDR4 RAM
256Gb SSD

Sensors

Front Lidar Hokuyo UAM-05LP-T301 – Safety compliant ISO13849-1, IEC61496-1/3
Rear Lidar Hokuyo URG-04lx
Front camera RGB / 3D depth camera
Rear camera RGB / 3D depth camera
IMU - UM7 AHRS 9dof
Optional: 3D Lidar 360º

Localization

2D Slam
3D Slam
Natural Navigation

Mapping/Path Definition

Automatic Mapping
Follow-me path planning
Sketch work areas on the map
Path sketching
Geofencing

Navigation Behaviors

Follow object or person
Seeking
Seek and Fetch

Standard Behaviors

Battery charging behavior
Obstacle behavior
Intersection behavior

Safety

Emergency stop switch
Obstacle detection 360°
Warning light (revolving orange light)
Sound Warnings
RGB Status LEDs

Control

Any tablet web browser (HTML5 interface)
Remote control device

Communication

Bluetooth
WiFi

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