



## **Innovation Meets Uniqueness Producing The Most Advanced AMR**

The **TUGBOT** concept solved an industry problem by enabling companies of all sizes to automate their intra-logistics processes that use human labour to pull carts and trolleys from point A to point B.

Now presenting the second generation the **TUGBOT 2** with cutting-edge technology and improved performance on critical areas as pull force, serviceability, electronics and operational and charging times.



**EASY TO USE  
QUICK TO DEPLOY**



**MAX PULL FORCE  
UP TO 600 KG**



**CHARGING TIME  
25 MINUTES**



**BATTERY LIFE  
UP TO 8 HOURS**

## Product Details

*Collaborative autonomous mobile robot for transportation of payloads, tow wheeled carts, inspection, R&D and more*

## Dimensions

*661 × 598 × 630 mm (LxWxH)*

## Weight

*90Kg (base configuration)*

## Max Pull Force

*Up to 600 Kg*

## Max Incline

*5°*

## Operation Environment

*Indoor*

## Attachments

*Mechanical tow hook adjustable to any cart*

## Battery / Charger

*LifePo 48V @ 21Ah  
Battery Charger - Wireless*

## Battery Life

*Up to 8h*

## Charging Time

*25 minutes*

## PC

*Motherboard - B560M-ITX/ac  
CPU - i5-10500T  
RAM - 16Gb DDR4  
Storage - 250Gb SSD*

## Sensors

*1x Front Lidar  
Sick Nanoscan3 – Safety compliant ISO13849-1, IEC61496-1/3  
1x Rear Lidar  
Sick TiM 561  
Front and Rear Camera  
2x RGB / 3D depth camera (Realsense D435)  
IMU - UM7 AHR5 9dof*

## 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*

