TIAGo® OMNI BASE

TECHNICAL SPECIFICATIONS

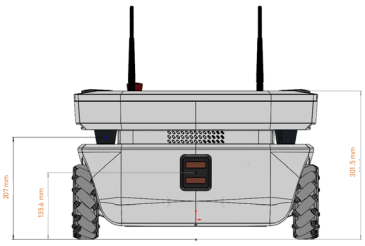
GENERAL FEATURES

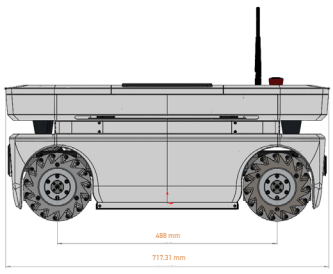
Payload	Dimensions	Max. speed	Traversable gap	Wheels	Shock absorber
100 kg	50 x 72 x 31 cm	1,5 m/s	150 mm	4 mecanum motor	4

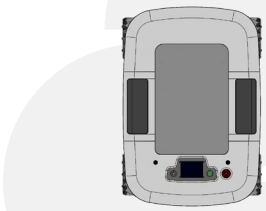
TIAGo OMNI Base

Innovation in every direction

Discover the flexibility of the Omni wheels and the efficient suspension system to navigate with ease in every direction even on irregular terrain. Move up to 100 kg payload safely with the two LiDAR sensors for unobstructed 360º FoV detecting any obstacle and planning any path in constrained environments. Take advantage of the platform to push the limits of your research in dynamic navigation, visual odometry and logistics task optimisation. Schedule your algorithms, coordinate a fleet of robots, and deploy them easily with the Web User Interface.







PAL ROBOTICS

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info@pal-robotics.com
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TIAGo® OMNI BASE

TECHNICAL SPECIFICATIONS

USER PANEL	Audio	1x 5 W audio speaker
	Expansion	10x GPIO (5x IN / 5x OUT)
	Power	Battery / +12V / 5A
CONNECTIVITY	Wi-Fi	802.11ax Wi-Fi 6
	Bluetooth	Smart 4.0 Smart Ready
	Ethernet	2x Gigabit
	USB	2x USB 3.0 / 4x USB 2.0
COMPUTER	CPU	Intel i5
	SSD	250 GB
	RAM	8 GB
ELECTRICAL FEATURES	Battery	1x 36 V 20 Ah Li-Ion
INTEGRATED	LiDAR	2x Laser 360-degree LIDAR FoV 10m
	IMU	6DoF
	Omnidirectional platform	✓
	Speaker	✓
	User panel	✓
	Indication lights	✓
	Power connector	✓
	On/Off button	✓
	Emergency stop	✓
	Electric switch	✓
	Power charger	✓
	Tactile control display	✓
	Ubuntu LTS + ROS	✓
	Navigation software	✓
	Motor wheels odometry	✓

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TECHNICAL SPECIFICATIONS

SOFTWARE	Ubuntu LTS + ROS	✓
	Navigation software	✓
	Unlimited number of computer developments	✓
	Gazebo dynamic simulation	✓
	Rviz	✓
	Text-to-speech	✓
OPTIONALS	CPU	i7
	RAM	16 GB
	SSD	500 GB
	Additional battery	36V 20Ah Li-Ion
	2x channel CAN Board	✓
	Dock station	✓
	LiDAR	2x Laser 360-degree LIDAR FoV 25m
	RGB-D camera on top	✓
	Advanced Navigation	✓
	Visual Programming	✓
	Multilingual text-to-speech	✓
	Premium transportation crate	✓

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