# Outdoor all-terrain Multifunctional transportation robot platform (GT-01 R300)

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The GT-01 RTK series outdoor all-terrain multi-purpose transport robot platform is a large tracked, wire-controlled chassis designed specifically for outdoor off-roading and agricultural applications. It supports high-precision RTK navigation, enabling users to efficiently dispatch the platform to perform specific tasks. Its design is widely applicable to agriculture, gardening, and other outdoor operations.

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Category	Parameters	
Function Support	**RTK High-Precision Navigation**	The GT-01 series outdoor all-terrain multi-functional transport robot platform is equipped with an RTK high-precision navigation system, which can provide centimeter-level positioning accuracy in open outdoor environments, ensuring the robot's efficient operation and accurate path planning in complex terrain.
	Intelligent Path Planning	Using the measurement data of LiDAR and the path planning algorithm, the intelligent navigation robot mobile platform can achieve precise positioning and path planning, realize point-to-point driving, and realize free navigation and trajectory mode (let the chassis drive along the trajectory) in path planning. The conventional positioning accuracy can reach ±10mm.
	Dynamic obstacle Detection and Avoidance	LiDAR can scan the environment in real time, detecting the location and movement of dynamic obstacles (such as people and other moving objects). Based on this information, the intelligent navigation robot mobile platform can perform dynamic obstacle avoidance to prevent collisions.
	Open Protocol for Secondary Development	The robot supports data openness and controls the status information and command execution of the mobile robot through the MOTT protocol/Modbus TCP protocol, making it easy for users to carry out secondary development and quickly adapt to different application requirements.
	Customizable Operations	The intelligent navigation robot mobile platform supports customized operations and can be customized according to user needs and scenarios. For example, it can set restricted areas in specific areas, prioritize avoiding specific obstacles, and automatically recharge when the battery is low.
	Usage Scenarios	It supports use in scenes with feature points, such as offices, factories or office buildings with fixed objects, such as tables, chairs or shelves, etc. If the scene is completely empty and no feature map can be formed, a map cannot be established and laser navigation is not suitable.
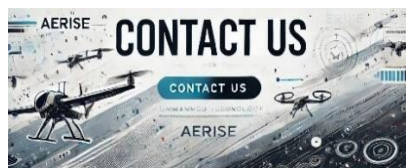
Product Parameter

Overall dimensions (L*W*H)	1465*1000*950 (mm)
Maximum Speed	1.4m/s
Chassis Quality	250kg
Climbing Ability	30%
Obstacle course (vertical steps)	12cm
Charging time	3h
Material	Q235
Vertical Load	300kg
Steering Motor Power	1500W*2
Theoretical range	>3h
Protection rating	IP54
Battery Capacity	48V 40Ah
Operating temperature	-10-60°C
Emergency Stop Method	Remote emergency stop/hardware emergency stop
Motor control accuracy	± 1rpm
Navigation Method	RTK Integrated Navigation
Navigation Accuracy	± 10cm
Navigation Protocol	MQTT