

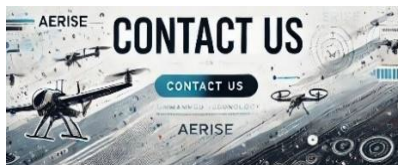
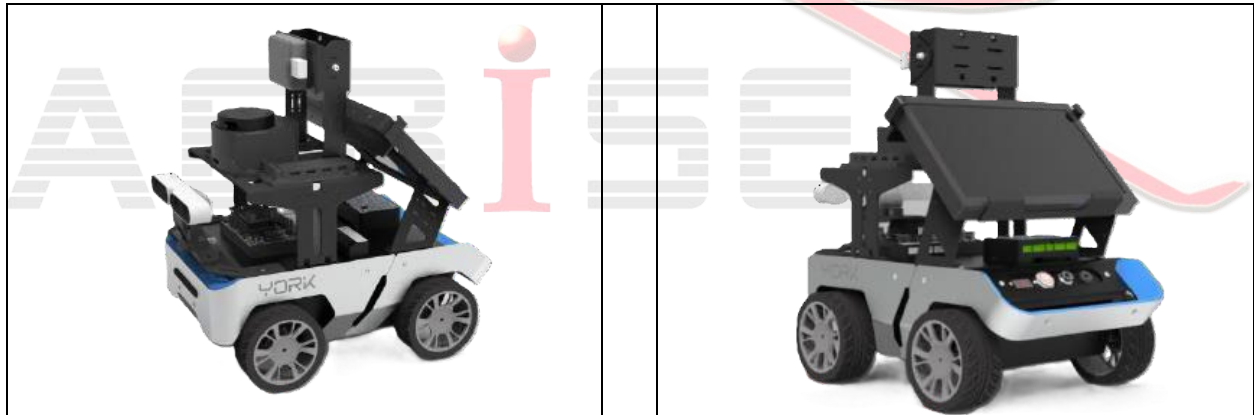
Multimodal Intelligent Navigation Vehicle (York-P1)

Updated on Oct 2025

The York-P1 series intelligent car adopts a high-performance chassis module, with a core powered by the STM32F series processor. It is equipped with an industrial control computer, depth camera, single-line LiDAR, millimeter-wave radar, and IMU inertial measurement unit, featuring a standard serial port interface. It can complete visual SLAM navigation, autonomous path planning, LiDAR mapping, camera vision system line-following, video monitoring, and dynamic obstacle avoidance functions. It can be used for skills training in sensor testing, assembly, calibration, line-control chassis speed calibration, angular velocity calibration, odometer calibration, drive motor PID calibration, and line-control chassis kinematic analysis. Programming training for vehicle chassis control and autonomous driving functions can also be conducted based on the C programming language.

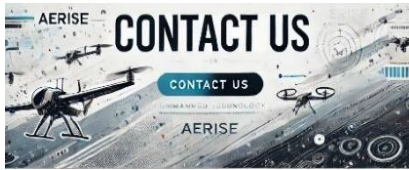
Product Type:

- York Four-Wheel Differential Series Car (York-P1)



Main Functions:

1. Chassis Structure Disassembly Practice
2. Line-Control Chassis System Calibration Practice
3. Chassis Motion Control and Communication System Practice
4. ROS Operation Practice
5. Calibration and ROS Practice Based on Various Sensors
6. Autonomous Driving Practice Based on Laser Navigation
7. Autonomous Driving Practice Based on Visual Navigation
8. Navigation Function Practice Based on Multi-Sensor Fusion
9. Visual Automatic Tracking
10. Visual and Lidar Fusion Mapping and Navigation
11. Visual Object Recognition
12. Laser Mapping



Product Parameter

Overall dimensions (L*W*H):	390*310*336 mm
Driving Mode:	Four-wheel differential motion mode (rubber wheel) Mecanum wheel omnidirectional motion mode (Mecanum wheel)
Maximum Speed(empty load):	1m/s
Self-weight:	6.5KG
Navigation method:	2D SLAM laser navigation
Positioning Accuracy:	± 5cm
Battery Capacity:	12V 10AH
Control mode:	Serial communication
Supported Systems:	Ros, Ubuntu
Sensors and accessories:	<ul style="list-style-type: none"> • Single-line 2D laser radar • RK3588 main control board • IMU module • Depth camera • Scene sandbox (optional) • 9.7-inch display screen • Packaging box • Model aircraft remote control

