

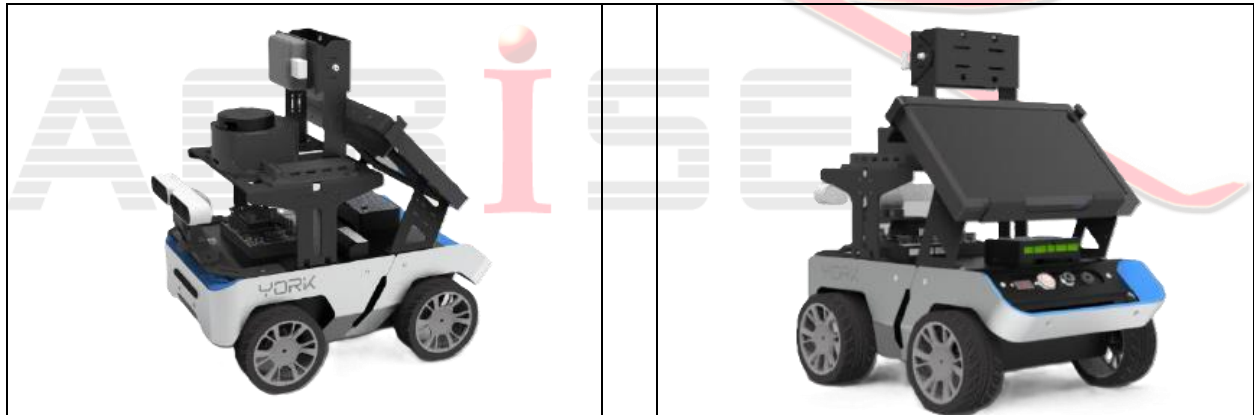
# Multimodal Intelligent Navigation Vehicle (York-P1)

Updated on Sep 2024

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

A large, stylized AERISE logo with a red airplane silhouette flying above the text. The 'i' in AERISE is highlighted in red.