

Sedenius 1:10 RC Model Car

The ready-to-use development platform for autonomous driving, driver assistance and control — in 1:10 scale.



The Sedenius 1:10 RC Model Car gives universities, research institutions and R&D teams a complete platform for driver assistance systems, autonomous driving and control engineering. It ships with a pre-installed ROS 2 environment, so your team can focus on developing and testing algorithms instead of setting up hardware. LiDAR, camera, ultrasonic sensors and an IMU deliver real sensor data; an NVIDIA Jetson Orin Nano processes it on board. At 1:10 scale the car carries a full sensor suite while staying compact enough for indoor labs and lecture halls.

1:10

Scale

ROS 2

Pre-installed

Orin Nano

NVIDIA Jetson, 8 GB

4

Sensor types: LiDAR, camera, ultrasonic, IMU

APPLICATIONS

- Developing and testing autonomous driving algorithms
- Hands-on teaching in robotics and vehicle technology
- Research on environment perception and obstacle detection
- Testing new sensors and control strategies
- Teleoperation and handover between human and autonomy
- SLAM, localization and path planning

Hardware

PERCEPTION

Camera	Intel RealSense D435i depth camera RGB 1920 × 1080 · Depth 1280 × 720 (point cloud in ROS 2) or global-shutter USB camera, monochrome 1280 × 720
LiDAR	LDROBOT DTOF LD19 / STL-19P Scan frequency 10 Hz · angular resolution 0.8° @ 10 Hz · measurement resolution 15 mm · range 0.02–12 m (70 % target reflectivity)
Ultrasonic sensors	SRF10 (I ² C) Range 3 cm – 6 m
IMU / compass	CMPS12 (I ² C / serial)

COMPUTE & CONTROL

Main computer	NVIDIA Jetson Orin Nano 8 GB with SSD storage Runs ROS 2 and the customer application
Drive unit	Custom PCB Controls steering and motor, reads sensor data, collision avoidance

DRIVETRAIN & POWER

Motor	540-class brushless DC motor
Motor controller	VESC-based
Power	3S LiPo battery External power supply for stationary operation

SOFTWARE

- Pre-installed ROS 2 system on the Jetson
- Ready-to-use ROS 2 interface to the drive unit
- Robust collision-avoidance layer on the drive unit
- ROS 2 nodes for ultrasonic and IMU data
- Default RViz configuration to visualize all sensor data
- Manual and autonomous drive modes; remote control overrides ROS commands

SCOPE OF DELIVERY

- Sedenius 1:10 RC Model Car with sensors and actuators as described
- Pre-installed ROS 2 system with basic components
- 3S LiPo battery
- Power supply for stationary operation
- User manual

Request a quote or demo

Talk directly to the engineers who developed the car.
Pricing on request.

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