**ROS powered UGVs**

AgileX offers a full line up of mobile ROS powered UGV/AGVs for industrial and research applications. These platforms come in a variety of sizes and drive options for; 4 wheel drive, omni-directional drive, Ackerman steering and tracked options with payloads of up to 150kgs. The AgileX development kits expand platform capabilities to include: autonomous driving, path planning, 3D point cloud mapping and obstacle avoidance.

**Supports**

**ROS**

**Robot Operating System** – bold title

ROS support enables autonomous driving development, 3D SLAM mapping & navigation as well as easy integration with additional sensors.

**CAN (Switch from ROS2)**

**Controller Area Network** – bold title

CAN is a robust vehicle bus standard designed to allow microcontrollers and devices to communicate with each other’s applications without a host computer.

**Gazebo**

**High Quality Simulation** - bold title

Gazebo offers the ability to accurately and efficiently simulate populations of robots in complex indoor and outdoor environments.

**Autonomous Driving Development**

**Open Source ROS Packages**

Open source SDK & ROS packages provided.

(Documentation link: <https://github.com/agilexrobotics> )

**Development Kits**

AgileX development kits offer a fully integrated solution for robotics research and development. Equipped with a full suite of sensors, the development kits add additional support for: SLAM, Navigation, Vision based applications, GPS waypoint navigation and obstacle avoidance. Development kits come pre-installed with Linux, ROS as well as hardware drivers.

**Robust Industrial Applications**

All-terrain robots built for outdoor applications such as agriculture management, geographic surveying and environmental monitoring as well as indoor applications such as autonomous logistics and warehousing.

change “Watch the demo” to “Use Case Example”

**Link:** [**https://global.agilex.ai/blogs/news/how-n2-vision-nitrogen-mapping-robot-maximise-yield-for-farmer**](https://global.agilex.ai/blogs/news/how-n2-vision-nitrogen-mapping-robot-maximise-yield-for-farmer)

**Drive Options**

**Ackerman –** Front Two wheel drive, Ackerman steering options for autonomous driving research and development as well as commercial robot applications such as parcel delivery and unmanned logistics.

**4 Wheel Drive –** Four-wheel differential drive and independent suspension for superior traction in challenging environments such as sand, rocks and light debris.

**Tracked –** Heavy-duty performance for challenging terrain applications, tracked options are available for handling even the toughest off-road conditions.

**Omni-Directional –** Zero turning radius w/ 360 degree static steering, spin, traverse, diagonal and Ackermann steering modes.

**vSLAM, Navigation & Obstacle Avoidance**