UK / Europe distributor: www.autodiscovery.co.uk

W W W . A G I L E X . A I

Autodiscovery Company Profile

Autodiscovery was founded in 2020 in Oxfordshire in the United Kingdom. Autodiscovery's mission is to provide affordable automation available for everyone. We are expert systems and robotics engineers who are fully committed in supporting you on your robotics journey.

We are official distributors of AgileX Robotics robots, instruments and solutions in the UK. We always offer the best price on AgileX robotics, best warranty and expert support in English.

Company Profile

Founded in 2016, AgileX Robotics is a leading mobile robot chassis and unmanned driving solution provider, with a vision to enable all industries to improve productivity and efficiency through robot technology.

AgileX Robotics chassis-based robotics solutions have been applied to 1500+ robot projects in 26 countries for all industries, including inspection and mapping, logistics and distribution, smart factories, agriculture, unmanned vehicles, special applications, academic research, etc.

2021
Completes Series A Funding Round of 100 million RMB Releases full line up of industrial and research kit: R&D KIT PRO, Autoware Kit, Autopilot Kit, Mobile Manipulator Releases Omni-directional robot Ranger Mini

2020
THUNDER disinfection robot was released and attracted the attention of People's Daily Online, Xinhua News Agency, StartDaily and other domestic and foreign media. Listed in "Future Travel" of ChinaBang Awards 2020. Cooperate with Beijing Institute of Technology an establish a laboratory to promote the implementation of smart mobile technology. Launched the second generation of HUNTER series-- HUNTER 2.0.
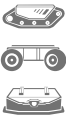
2019
The full range of AgileX Robotics chassis was unveiled: Ackermann front steering chassis HUNTER, indoor shuttle TRACER and crawler chassis BUNCKER.
AgileX Robotics Shenzhen branch was founded and AgileX Robotics Overseas Business Dept established. Won the honorary title of "Top 100 New-economy Enterprises in Guangdong-Hong Kong-Macao Greater Bay Area"

2018
All-round general programmable chassis SCOUT was launched, which won orders from Tsinghua University, Beijing Institute of Technology, Chinese Academy of Sciences and other famous institutions upon its release.

2017
Automatic Parking AGV was launched

2016
AgileX Robotics was founded
Obtained angel-round financing from "Legend Star" and XBOTPARK Fund

Cooperative Client

Selection Guide

CHASSIS	SCOUT2.0	SCOUT MINI	RANGER	RANGER MINI2.0	HUNTER2.0	HUNTER SE
Steering	Differential steering	Differential steering	Independent four-wheels steering	Independent four-wheels steering	Ackermann steering	Ackermann steering
Size	930x699x349mm	612x580x245mm	1228x876x520mm	738x500x338mm	980x745x380mm	820x640x310mm
Speed(full load)	1.5m/s	3m/s	2.6m/s	1.5m/s	1.5m/s	4.8m/s
Load capacity	50KG	10KG	150Kg	80KG	150KG	50KG
Detachable battery	--	--	●	●	●	●
Battery capacity Battery upgrades	↑ 24V60AH 24V30AH	24V15AH	↑ 48V24AH*4 48V24AH	48V24AH	↑ 24V60AH 24V30AH	↑ 24V30AH 24V15AH
Operating terrain type	Normal、Outdoor obstacle-crossing, climbing	Normal、Outdoor obstacle-crossing, climbing	Normal、Outdoor obstacle-crossing, climbing	Normal、Outdoor obstacle-crossing, climbing	Normal、 ≤10° climb grade	Normal、 ≤10° climb grade
IP rating	IP64 IP44 IP22	IP22	IP55	IP54	IP54 IP22	IP22
Page	01	02	03	04	05	06

CHASSIS	BUNKER PRO	BUNKER	BUNKER MINI2.0	TRACER
Steering	Tracked differential steering	Tracked differential steering	Tracked differential steering	Two wheels differential steering
Size	1064x845x473mm (Without antenna)	1023x778x400mm	660x584x340mm	685x570x155mm
Speed(full load)	1.5m/s	1.5m/s	1m/s	1.6m/s
Load capacity	120KG	70KG	25KG	100KG
Detachable battery	--	--	--	--
Battery capacity Battery upgrades	48V60AH	↑ 48V60AH 48V30AH	24V30AH	↑ 24V30AH 24V15AH
Operating terrain type	Normal、Outdoor obstacle-crossing, climbing、Wading	Normal、Outdoor obstacle-crossing, climbing	Normal、Outdoor obstacle-crossing, climbing、Wading	Flat terrain No slope and no obstacles
IP rating	IP67	IP54	IP67	IP22
Page	07	08	09	10

Selection Guide

KIT	TRACER MINI NAV versions	AUTOKIT	R&D KIT/PRO	ROS2 EDR KIT	COBOT KIT LITE	COBOT KIT	COBOT KIT PRO
SLAM	●	●	●	●	●	●	●
Path planning	●	●	●	●	●	●	●
Perception & obstacle avoidance	●	●	●	●	●	●	●
Localization & navigation	●	●	●	●	●	●	●
Localization & navigation method	LiDAR+CAMERA	LiDAR	LiDAR+CAMERA	LiDAR+CAMERA	LiDAR+ODOM	LiDAR+ODOM	LiDAR+ODOM
APP operation	--	--	--	--	--	--	--
Visual recognition	●	--	●	●	●	●	●
State monitoring	--	--	--	--	●	●	●
Panoramic information display	--	--	--	--	--	--	--
Secondary development	●	●	●	●	●	●	●
Page	11	12	13	14	15	16	17

Industry solution customization service

Requirements collection --→ **Preliminary research** --→ **Customized solution report** --→ **Customer delivery**

Requirements collection	Preliminary research	Customized solution report	Customer delivery
Technical discussion	Industry research	Robot design scheme Structure and ID design	customer guidance and training
Requirements management	On-site investigation and evaluation	Robot hardware scheme Chassis + brackets + hardware equipment	Customer delivery and testing
Requirements confirmation	Technical evaluation report	Robot software scheme (perception, navigation, decision making)	Technical support
	Program overview	Periodic Assessment Design, Assembly, Testing, Implementation	Project marketing service

» SCOUT Four-Wheel Differential Series

SCOUT 2.0- The All-in-one Drive-by-wire Chassis
Specially designed for industrial robotic applications in indoor and outdoor scenarios.

- Four-wheel drive, better fit for driving on complex terrain
- Super long battery duration, available with external expansion
- 400W brushless servo motor
- Circulation cooling system for all-day, all-weather operation
- double wishbone suspension ensures smooth ride on bumpy roads.
- Support rapid secondary development and deployment

Applications:
inspection, detection, transportation, agriculture, and education

High precision road measuring robot

Agricultural Patrol robot

Scan QR code and drag to bottom to view product videos.

Specifications

Category	Specification	
Dimensions (WxHxD)	930mm x 699mm x 349mm	
Weight	67Kg (±1)	
MAX Speed	1.5m/s	
Minimum Ground Clearance	135mm	
Rated Travelling Load	50KG(Friction Coefficient 0.5)	
Climbing Ability	<30° (With Loading)	
Operating temperature	-10~40℃	
Battery	24V / 30Ah (Standard)	24V / 60Ah (Optional)
Suspension form	Front Double Rocker Independent Suspension	Rear Double Rocker Independent Suspension
Charging time	3h	6h
Protection Level	IP22 (Customizable IP44 IP64)	
Certification	CE	
Optional accessories	5G parallel driving/Autowalker intelligent navigation KIT/Binocular depth camera/ Automatic charging pile/Integrated inertial navigation RTK/Robot arm/LiDAR	

≫ SCOUT Four-Wheel Differential Series

SCOUT MINI-The Miniature High-speed Drive-by-wire Chassis
MINI size is more maneuverable at high speed and in narrow spaces

Wheel Options (Off-road/ Mecanum)

Four-wheel differential steering enables zero turn radius

high driving speed
Up to 10KM/H

Wheel hub motor supports flexible movements

Lightweight vehicle body capable of longer range operation

Independent suspension provides strong driving force

Secondary development and external expansion supported

Applications：inspection, security, autonomous navigation, robot research & education, photography, etc.

Intelligent industrial inspecting robot   Autonomous navigation robot

Scan QR code and drag to bottom to view product videos.

Specifications

Category	Specification	
Dimensions (WxHxD)	612mm x 580mm x 245mm	
Weight	23Kg (±0.5)	
MAX Speed	3m/s (Standard Wheel)	3m/s (Mecanum Wheel)
Minimum Ground Clearance	115mm	
Rated Travelling Load	10Kg (Standard Wheel)	20Kg (Mecanum Wheel)
Climbing Ability	<30° (Without Loading)	<8° (Without Loading)
Battery	24V / 15Ah (Standard)	
Suspension form	Trailing arm independent suspension	
Protection Level	IP22	
Certification	CE	
Optional accessories	5G parallel driving/ Binocular depth camera/ LiDAR /IPC /IMU/ R&D KIT LITE&PRO	

» RANGER Independent Four-Wheels Steering Series

RANGER-Omnidirectional Mobile Robot Chassis
Strong flexibility、Strong bearing capacity、Wide applicability、Strong human-computer interaction

150KG load capacity

160MM ground clearance, easy to overcome obstacles

Four-wheel universal structure, flexible deployment

Switch between four sports modes

Modular UPS, support hot swapping

Secondary development and external expansion supported

Application: Engineering Survey, Energy Inspection, Smart Security, Logistics delivery, etc.

Logistics Delivery Robot

Spin   Traverse   Skew   Ackerman

Specifications

Category	Specification	Category	Specification
Dimensions (WxHxD)	1228mm×876mm×520mm	Climbing Ability	10°
Axle Track	560 MM	Weight	100KG
Wheelbase	890MM	Maximum Load	150KG
Motor	48V brushless geared motor	Battery Life	2-8H
Rated Power	600W*4	Charging Time	1H(Single Battery)
Rated Torque	22NM*4	Battery Type	Lithium Battery
Speed	0~2.6M/S	Single Battery Capacity	24Ah(Support up to 4 batteries)
Motion Mode	4 Drive 4 Steering	Rated Voltage	48V
Maximum Obstacle Height	100MM(Vertical Obstacles Fully Loaded)	Protection Level	IP55

» RANGER Independent Four-Wheels Steering Series

RANGER MINI2.0-Omnidirectional Mobile Robot Chassis

Multi-modal motion fusion design, fully adapting to the motion and steering of indoor and outdoor complex road conditions

Application: patrol, inspection, security

Collaborative Robot

RANGER S1

Four-wheel four-turn, zero turning radius

Switch between four motion modes

Support fast charging and hot swapping

80KG load capacity

Independent suspension, flexible deployment

Secondary development and external expansion supported

Spin   Traverse   Skew   Ackerman

Specifications

Category	Specification	Category	Specification
Model	RANGER mini 2.0	Drive Mode	Hub Motor
Dimensions (WxHxD)	738mm×500mm×338mm	Form of Cooling	air-cooled
Wheelbase	494mm	Operating temperature	—10~40°
Axle Track	364mm	Charger	54.75V20A
Weight	63KG	Charging Time	1.5H
Speed	5.4km/h	Rated Voltage	48V
Ground Clearance	107mm	Battery Type	Lithium Battery
Minimum Turning	0mm	Battery Parameters	48V24AH
Radius	Spin	Output Voltage	48V
Hub Radius	100mm	Motor	Steering Drive Motor 100Wx4
Parking Type	Electronic brake		Power Drive Motor 350Wx4
Maximum Load	80KG	Communication	CAN
Climbing Ability	15°(with load)	Suspension	Independent Suspension
Motion Mode	4 Drive 4 Steering	Protection Level	IP54
Maximum Travel	35KM	Maximum Endurance	7~8h

>> HUNTER Ackermann Steering Series

HUNTER 2.0- The Ackermann Front Steering Drive-by-wire Chassis
The best-in-class development platform to explore cutting-edge applications of low-speed autonomous driving applications

150 Kg High Load Capacity

Independent suspension capable of ramp parking

400W dual-servo motor

10KM/h high speed Up to 10KM/H

Portable replacement battery

Fully extensive with ROS and CAN Port

Applications: Industrial robot, autonomous logistics, autonomous delivery

Outdoor patrolling robot

Outdoor localization and navigation robot

Scan QR code and drag to bottom to view product videos.

Specifications

Category	Specification	
Dimensions (WxHxD)	980mm x 745mm x 380mm	
Weight	65Kg-72Kg	
MAX Speed	1.5m/s (Standard)	
Minimum Ground Clearance	100mm	
Rated Load In Movement	150KG	
Climbing Ability	<10° (With Loading)	
Battery	24V / 30Ah (Standard)	24V / 60Ah (Optional)
Suspension form	Front wheel non-independent suspension	
Protection Level	IP22 (Customizable IP54)	
Certification	CE	
Optional accessories	5G parallel driving/Autowalker intelligent navigation KIT/Binocular depth camera/LiDAR/IPC/IP camera/Integrated inertial navigation RTK	

≫ HUNTER Ackermann Steering Series

The Ackermann Front Steering Drive-by-wire Chassis
The upgraded 4.8m/s speed and a modular shock absorption system brings a better experience for autonomous driving applications

4.8M/S Upgraded Driving Speed

50 Kg High Load Capacity

In-wheel Hub Motor

Quick to replace Battery

Application：Autonomous parcel delivery, Unmanned food delivery, Unmanned logistics, Patrolling.

Scan QR code and drag to bottom to view product videos.

Specifications

Category	Specification	
Dimensions	820mm x 640mm x 310mm	
Minimum Ground Clearance	120mm	
Weight	38kg	42kg
Maximum Payload	50kg	
Battery	24V15Ah lithium battery	24V30Ah lithium battery
Charging Time	2h	3h
Max Travel	> 30Km	> 60Km
Motor type	105w*1 (Brushless DC motor)	350w*2 (Brushless DC motor)
Operating temperature	-10~40℃	
Suspension form	Front wheel non-independent suspension	
Maximum Obstacle Height	50mm	
Climbing Ability	10°(full load)	
Minimum Turning Radius	1.5m	
Maximum speed	4.8m/s	
Braking distance	2m	
Protection Level	IP22	
Communication interface	CAN	

≫ BUNKER Tracked Differential Steering Series

BUNKER PRO-Enhanced Trcked Chassis Robotics Development Platform
Super high off-road mobility for easily tackling challenging environments

IP67 Solids Protection/Waterproof

Long run time

Maximum gradeability

Strong load capacity

Shockproof & all-terrain

1500W dual-motor drive system

Fully extensible
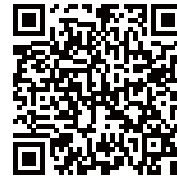
Applications：Agriculture, Building modes, Surveying and mapping, Inspection, Transport.

Scan QR code and drag to bottom to view product videos.

Specifications

Category	Specification
Dimension	1064mm x 845mm x 473mm（excluding antenna）
Chassis height	120mm
Weight	180kg
In situ rotation maximum load	120kg
Battery	48V 60Ah Lithium battery
Charging time	4.5h
Operating temperature	-20℃~60℃
Suspension	Christie suspension + Matilda four-wheel balance suspension
Motor type	2×1200W brushless servo motor
Maximum barrier height	180mm
Climb grade	30°no-load climbing(Can climb stairs)
Max Travel	15Km
Protection Level	IP67
Communication interface	CAN / RS232

≫ BUNKER Tracked Differential Steering Series

BUNKER-The Tracked Differential Drive-by-wire Chassis
Outstanding off-road and heavy-duty performance in challenging terrain environments.

Tracked differential steering providing strong driving force

Christie suspension system ensures stable operation

Strong off-road capability 36° maximum clime grade

Strong off-road capability 36° maximum clime grade

Applications: patrolling, inspecting, transportation, agriculture, disinfection, mobile grabbing, etc.

Mobile pick & place robot

Remote disinfection robot

Scan QR code and drag to bottom to view product videos.

Specifications

Category	Specification	
Dimensions (WxHxD)	1023mm x 778mm x 400mm	
Weight	145-150Kg	
MAX Speed	1.5m/s	
Minimum Ground Clearance	90mm	
Rated Load In Movement	70KG(Friction Coefficient 0.5)	
Climbing Ability	<30° (No Load and With Loading)	
Battery	48V / 30Ah (Standard)	48V / 60Ah (Optional)
Suspension form	Christie Suspension	
Protection Level	IP54	
Certification	/	
Optional accessories	5G parallel driving/Autowalker intelligent navigation KIT/Binocular depth camera/ Integrated inertial navigation RTK/LiDAR/Robot arm	

>> BUNKER Tracked Differential Steering Series

BUNKER MINI 2.0-Small size Tracked chassis robot development platform
Explore applications in narrow spaces with complex terrain.
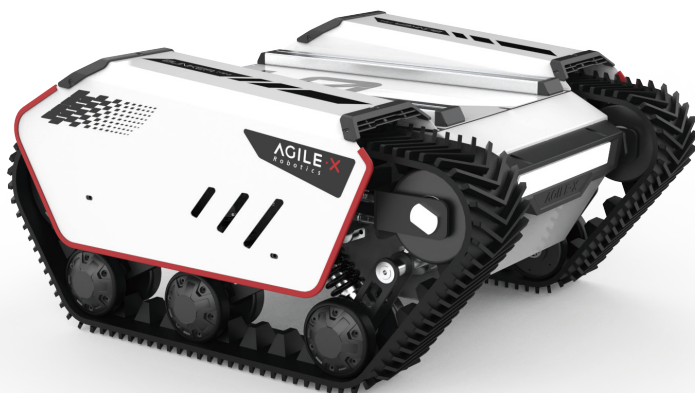
💧 IP67 Solids Protection/Waterproof

📐 Better Climb Capability

📦 120mm Obstacle Surmounting Capacity

0° Zero Turn Radius

25 KG High Payload Capability

Applications: Waterway Surveying and Mapping, Mineral Exploration, Pipeline Inspection, Security Inspection, Unconventional Photographing, Special Transportation.

▌ Specifications

Category	Specification
Dimensions	660mmX584mmX340mm
Height	80mm
Weight	55kg
Maximum Payload	25kg
Battery	24V30Ah Lithium Battery
Charging Time	3-4h
Operating Temperature	-20°C~60°C
Power Drive	Left and right independent drive Track-type differential steering
Motor	250w*2 (Brushed DC Motor)
Obstacle Surmounting Capacity	120mm
Climbing Ability	30° (No payload)
Minimum Turning Radius	0m (In-situ Rotation)
Protection Level	IP67
Communication interface	CAN

» TRACER Two Wheels Differential Steering Series

TRACER-The Drive-by-wire Chassis for Indoor AGVs
Highly cost-effective development platform for indoor unmanned delivery applications

100KG super load capacity

Flat design intended for indoor maneuvering

Differential rotation capable of zero turn radius

Swing arm suspension provides strong driving force

Secondary development and external expansion supported

Applications: Industrial logistics robot, agricultural greenhouse robot, indoor service robots, etc.

"Panda greenhouse autonomous robot

Pick & place robot

Scan QR code and drag to bottom to view product videos.

Specifications

Category	Specification	
Dimensions (WxHxD)	685mm x 570mm x 155mm	
Weight	28Kg-30Kg	
MAX Speed	1.6m/s	
Minimum Ground Clearance	30mm	
Rated Load In Movement	100KG (Friction Coefficient 0.5)	
Climbing Ability	<8° (With Loading)	
Battery	24V / 15Ah (Standard)	24V / 30Ah (Optional)
Suspension form	Swing arm non-independent suspension	
Protection Level	IP22	
Certification	/	
Optional Accessories	IMU/Binocular depth camera/Automatic charging pile/LiDAR/Integrated inertial navigation RTK/Robotic arm/IPC	

≫ **TRACER Two Wheels Differential Steering Series**

TRACER Mini Nav-Indoor AGV

Tracer Mini Navigation version are capable of avoiding and navigating around obstacles. It can be utilized for many different tasks, including testing, delivery, inspection, and research.

40KG super load capacity

Autonomous path planning

Autonomous stopping and obstacle avoidance

Differential rotation, 0 turning radius

Secondary development and external expansion supported

Applications: ROS education, factory transport, indoor service robots, and inspection robots

Specifications

Category	Specification
Dimensions (WxHxD)	400mm x 400mm x 260mm
Weight	30Kg-35Kg
MAX Speed	1.6m/s
Minimum Ground Clearance	30mm
Rated Load In Movement	40KG (Friction Coefficient 0.5 Ground Test)
Climbing Ability	<10°
Battery	24V / 15Ah
Suspension form	Front Drive Rear Swing Suspension
Protection Level	IP22
Certification	/
Optional Accessories	IMU/Depth Camera/Automatic charging pile/LiDar/ Combined Inertial Navigation RTK/Robotics Arm/Industrial Computer

≫ AUTOKIT-The Open Source Autonomous Driving Development KIT

Autonomous driving development KIT based on the Autoware open source framework

- APP enabled real time panoramic monitoring
- Autonomous obstacle avoidance
- Autonomous path planning
- Rich open source software packages
- ROS-based application cases
- Detailed development documentation

Scan QR code and drag to bottom to view product videos.

Adding high precision antenna and VRTK

Standard autonomous driving open source development KIT

Specifications

Category	Specification	
	Model	AUTOKIT	AUTOKIT PRO
Standard Hardware Configuration	Computer unit	ASUS VC66 (i7-9700/16G/512G)	APQ (I7-9700/32G/256G/1660) with 1660 graphics card
	Multi-beam LiDAR	RoboSense RS-Helios-16P	
	Communication module	Huawei 4G Router	
	LCD screen	14 inch IPS1920*1080	
	keyboard	Logitech K400 Plus	
	USB-HUB	UGREEN 12V 7hubs	
	Regulated Power Supply	24Vto24V10A、24Vto12V20A	
	Stand	pro	
	Depth camera	D435	
	RTK-GPS	/	StarNeto M2
	IMU	/	CH110
	Monocular camera	/	M3
Software Features	Control mobile robot chassis based on ROS, view 3D point cloud data based on RS16 radar, use Autokit to construct 3D point cloud map, and view 3D point cloud data, use Autokit to record and track waypoints, stop obstacles, and use hybrid A* for free navigation , Use Autokit for local local path planning		Added to the base version: Edit vector maps (lane markings, zebra crossings, curbs, etc.) Global Path Planning with Autokit (combined with vector map)

## » R&D KIT/PRO-The Dedicated Educational Purpose Development KIT

The ROS/Rviz/Gazebo/Nomachine ready development KIT customized for robotics education and industrial application development.

- High precision localization & navigation
- Autonomous 3D mapping
- Autonomous obstacles avoidance
- High-performance computing unit
- Complete development documents and DEMO
- All-terrain and high-speed UGV

R&D KIT LITE
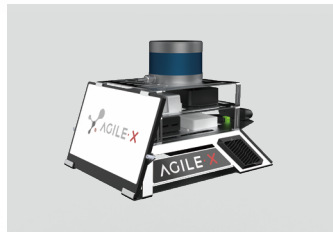
R&D KIT PRO

Scan QR code and drag to bottom to view product videos.

Specifications

Category	Specification	
Model	SCOUT MINI LITE	SCOUT MINI PRO
Industrial control system	Nvidia Jetson Nano Developer Kit	Nvidia Xavier Developer Kit
LiDAR	High precision mid-short range LiDAR-EAI G4	High precision long range LiDAR-VLP 16
Camera	Intel Realsense D435	
Monitor	Size: 11.6 inch; Resolution:1920 x 1080P	
Chassis module	SCOUT 2.0/SCOUT MINI/BUNKER	
Pre-installed system	Ubuntu 18.4 and ROS	

ROS2 EDU KIT

With the ROS2Foxy version as the core, it integrates vision, radar, motion control and other modules to provide a comprehensive robot development platform for education and scientific research.

- High precision localization & navigation
- Autonomous 3D mapping
- Autonomous obstacles avoidance
- High-performance computing unit
- Complete development documents and DEMO

ROS2 EDU KIT LITE

ROS2 EDU KIT PRO

Specifications

Name	Item	Model
LITE	Computer unit	minipc i5 16G 256
	2D Lidar	G4
	Camera	RealSense D435
	Monitor	14 inch IPS 1920*1080 HDMI
	keyboard	k400 Plus
	Router	GL.iNet AR750s
	USB HUB	7-Port USB3.0 Hub / 12V
	Bracket	
	Regulated Power Supply	12V to 5V 15A
		24V (15-40V) to 12V/20A
PRO	Computer unit	minipc i7 16G 512G
	3D LiDAR	RS16 (Educational Edition)
	Camera	RealSense D435
	Monitor	14 inch IPS 1920*1080 HDMI
	Keyboard	k400 Plus
	Router	GL.iNet AR750s
	USB HUB	7-Port USB3.0 Hub / 12V
	Bracket	
	Regulated Power Supply	24V (15-40V) to 12V/20A
	Chassis module	Scout 2.0/Scout mini/Hunter 2.0/Hunter se/ Bunker pro/Bunker/Bunker mini/Tracer/Tracer mini

≫ COBOT KIT LITE-with integrated functional modules that possesses flexibility

efficiency, collaboration, safety, and programmability.

- SLAM AND PATH PLANNING

- Autonomous navigation and obstacle avoidance

- Object recognition based on depth vision

- 6DOF manipulator components suite

- SUPPORTING PRACTICAL COURSES

Specifications

Accessories	Accessories list
Computer unit	Nvidia Xavier
LiDAR	Robosense
Camera	Realsense D435
Monitor	Size: 11.6 inch; Resolution:1920 x 1080P
IMU	CH110
Robotics arm	Lite 6
Chassis module	Tracer/Scout mini/Ranger mini 2.0
Pre-installed system	Ubuntu18.04 & ROS

≫ COBOT KIT-MOBILE MANIPULATOR

> It is a multifunctional robot that can perform intelligent transportation, sorting, inspection, assembly, and other duties in various settings and workplaces.

- SLAM and Path Planning
- Autonomous navigation and obstacle avoidance
- Object recognition based on depth vision
- 6DOF manipulator components suite
- All-purpose/off-road chassis
- Complete ROS documentation and simulation DEMO

Specifications

Accessories	Accessories list
Computer unit	APQ industrial computer
Multi-line LiDAR	Multi-line LiDAR sensor
Camera	Realsense depth Camera
LCD module	Portable flat panel display
	USB-to-HUB cable
Power module	RSD-500B-48 power
Regulated Power Supply	24v (15-40v) to 12v/20A power supply
	24v to 24v 10A
Communication module	B316-855 router
	USB3.0 to TYPE-C data cable 2M
Chassis module	BUNKER/SCOUT2.0
	Aviation plug (with wire)
	Onboard controller

Features of kit
ROS pre-installed in Industrial Personal Computer (IPC), and ROS nodes in all sensors and chassis
Navigation and positioning, mapping, and DEMO based on multi-line LiDAR
Motion control (including point and path control), planning, and staticobstacle avoidance based on robotic arm ROS node "Move it"
ROS control over robotic arm gripper AG-95
QR Code positioning, object color and shape recognition, and DEMO grasping based on Intel Realsense D435 binocular camera

AGILE·X

» COBOT KIT PRO-MOBILE MANIPULATOR

The high performance autonomous cobot Kit for robot educational research and commercial applications development

- ■ SLAM and Path Planning
- ■ Autonomous navigation and obstacle avoidance
- ■ Object recognition based on depth vision
- ■ 6DOF manipulator components suite
- ■ All-purpose/off-road chassis
- ■ Complete ROS documentation and simulation DEMO

Scan QR code and drag to bottom to view product videos.

Specifications

Accessories	Accessories list
Computing unit	APQ industrial computer
Multi-line LiDAR	Multi-line LiDAR sensor
	Sensor controller
LCD module	Portable flat panel display
	USB-to-HDMI cable
	UBS-to-CAN module
Power module	Switching DC-DC19~72V to 48V power supply
	DC-to-DC 12V24V48V power supply
	24v~12v step-down power module
Communication module	4G router
	4G router and antenna
Chassis module	Bunker/Scout2.0
	Aviation plug (with wire)
	Onboard controller
Features of kit	
ROS pre-installed in Industrial Personal Computer (IPC), and ROS nodes in all sensors and chassis.	
Navigation and positioning, mapping, and DEMO based on multi-line LiDAR.	
Motion control (including point and path control), planning, and staticobstacle avoidance based on robotic arm ROS node "Move it"	
ROS control over robotic arm gripper AG-95	
QR Code positioning, object color and shape recognition, and DEMO grasping based on Intel Realsense D435 binocular camera	

➤➤ LIMO-The Multi-modal ®ROS Powered Robot Development Platform

World's first ROS mobile robot development platform integrating four motion modes,adaptable to a wider range of application scenarios than table-robot

Accessory sand box

- ■ Autonomous localization, navigation and obstacle avoidance
- ■ SLAM & V-SLAM
- ■ Flexible switch among four motion modes
- ■ Fully expandable platform with ports
- ■ Rich ROS packages and documents

Scan QR code and drag to bottom to view product videos.

Specifications 🐍ROS ⫶⫶⫶ROS2 📦GAZEBO

Product		Specification
Mechanical Parameters	Dimensions	322mmx220mmx251mm
	Weight	4.8kg
	Climbing Ability	25°(40° in track mode)
System parameters	Power interface	DC (5.5x2.1mm)
	Max Travel	2400m
	Charging time	2h
Sensor	LIDAR	EAI X2L
	Camera	ORBBEC DaBai
	Industrial PC	NVIDIA Jetson Nano (4G)
	Voice module	IFLYTEK Voice Assistant/Google Assistant
	Trumpet	Left and right channels (2x2W)
	Monitor	7 inch 1024x600 touch screen
Software	Open sourse platform	ROS1/ROS2
	Communication protocol	UART
Standard accessories	Control method	APP
	Wheels included	Off-road wheel x4, Mecanum wheel x4, track x2

AGILEX · NAVIS 3D Laser Navigation Kit

NAVIS is a full-scenario autonomous navigation system product designed for semi-enclosed and fully enclosed environments. NAVIS uses LiDAR, depth cameras, and IMUs to build scenes and detect its environment. By combining the navigation brain, the data bridge, and the NAVIS Board system for data visualization, scene map production and management, task system management, and system management.
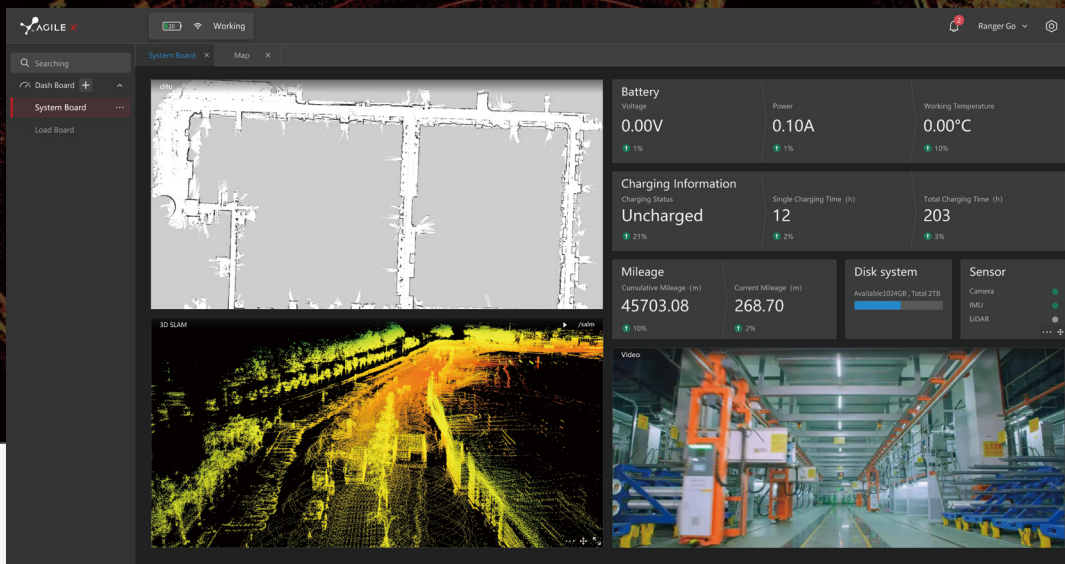
» Featured Functions

Human-machine interaction

NAVIS' highly intelligent interaction design is user-friendly and facilitates cross-platform operation across PC, mobile, and tablet platforms. Users can also manage robots, carry out task planning and path correction, and do other scheduling tasks using a user-customizable operating interface.

Strong compatibility

NAVIS supports all AGILEX ROBOTICS chassis and has great compatibility, making it easy for users to connect and use the robots.

Multi-sensor fusion

NAVIS can be fitted with a variety of sensors, including LIDAR, a depth camera, and a radio-time-code (RTK), to enable intelligent path planning, autonomous obstacle avoidance, high-precision positioning, and navigation.

Management of maps

NAVIS allows 3D mapping and map editing, giving users the freedom to select appropriate maps and alter virtual barriers and obstacles. It offers consumers adaptable planning and adjusting options.

Collaboration work

NAVIS supports local area network collaboration, can track the robot's status and operational environment in real-time, including crucial data like battery life, speed, and location, dynamically adjust robot planning, and complete multi-point tasks in an effective, stable, and secure manner.

Safety management

NAVIS can detect environmental barriers in real-time and steer clear of them. To maintain the security and stability of robot operation, it also incorporates a number of safety features, including light alert and emergency stop buttons.

» Application Scenarios

Security Patrols

Smart Factories

Warehouse Logistics

Customer case

» Environmental Remediation

» Engineering Surveying

» Agricultural Applications

» Industrial Applications

» Logistics Distribution

» University Research

≫ Security Patrols

Trusted By Customers

DU PENG, HUAWEI HISILICON ASCEND CANN ECOSYSTEM EXPERT

"The AgileX Mobile Robot Chassis demonstrates excellent mobility and obstacles crossing performance and has a standard development interface, which can quickly integrate the autonomous software and hardware to achieve the core function development in realizing localization, navigation, path planning and inspection functions, etc."

ZUXIN LIU, DOCTORAL STUDENT AT SAFETY AI LAB AT CARNEGIE MELLON UNIVERSITY (CMU AI LAB)
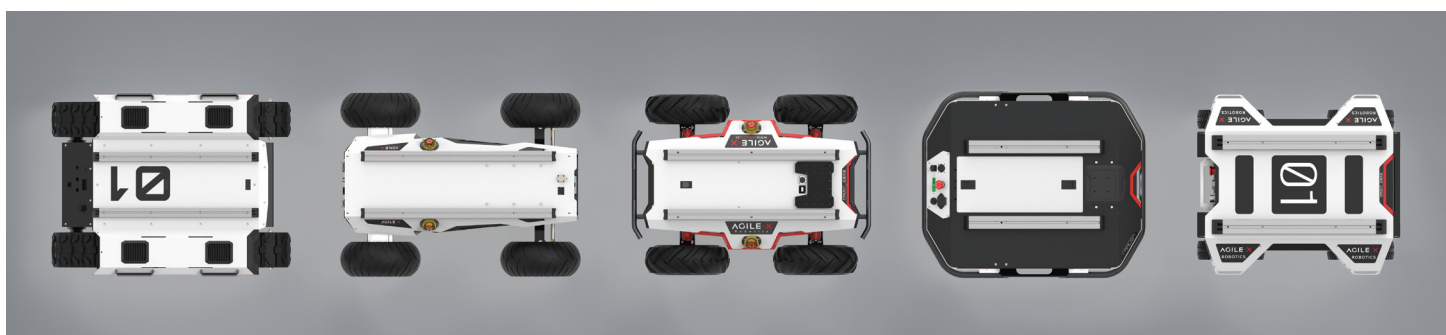
"The AgileX ROS developer suite is a combination of open source algorithm, high-performance IPC, various sensors, and a cost-effective all-in-one mobile chassis. It will become the best secondary development platform for educational and scientific research users."

HUIBIN LI, ASSISTANT RESEARCHER AT CHINESE ACADEMY OF AGRICULTURAL SCIENCES (CAAS)

"The AgileX SCOUNT 2.0 is a mobile chassis with advantages in outdoor off-road climbing, heavy-load operation, heat dissipation and secondary development, which greatly promotes the realization of intelligent agricultural inspection, transportation and management functions."

Mobile the Smart world

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