



AGILE X ROBOTICS

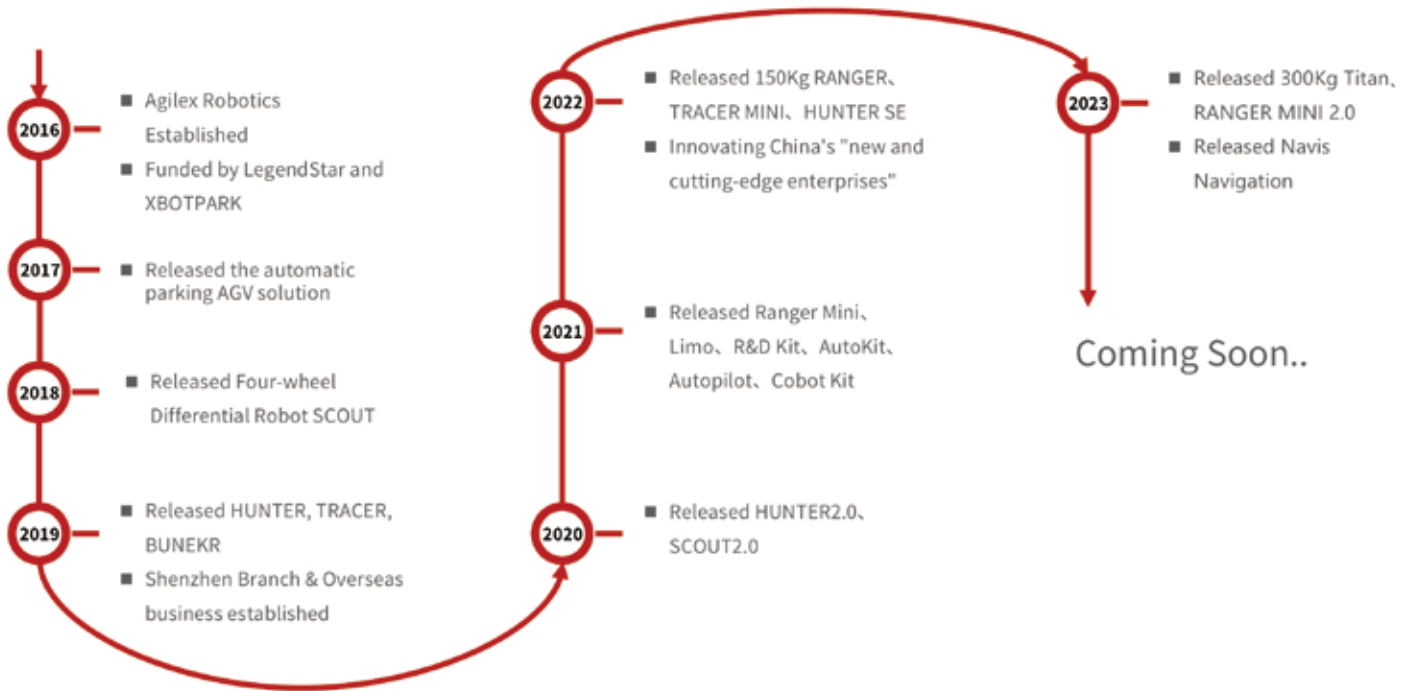
Product Category



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.



Our Customers



Selection Guide

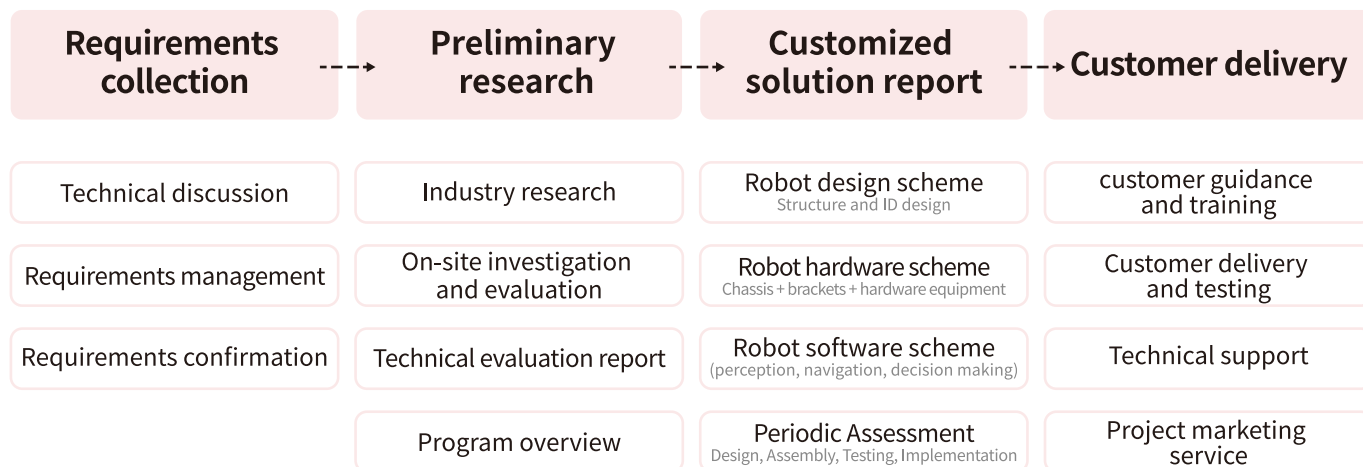
CHASSIS	SCOUT2.0	SCOUT MINI	RANGER	RANGER MINI2.0	HUNTER2.0	HUNTER SE
Steering	Differential steering	Differential steering	Independent four-wheels steering	Independent four-wheels steering	Ackermann steering	Ackermann steering
Size	930x699x349mm	612x580x245mm	1228x876x520mm	738x500x338mm	980x745x380mm	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
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CHASSIS	TITAN	BUNKER PRO	BUNKER	BUNKER MINI2.0	TRACER
Steering	Front & real AckermannSteering	Tracked differential steering	Tracked differential steering	Tracked differential steering	Two wheels differential steering
Size	1550 980 710mm	1064x845x473mm (Without antenna)	1023x778x400mm	660x584x340mm	685x570x155mm
Speed(full load)	3m/s	1.5m/s	1.5m/s	1m/s	1.6m/s
Load capacity	300KG	120KG	70KG	25KG	100KG
Detachable battery	可快拆	--	--	--	--
Battery capacity Battery upgrades	↑ 48V24AH*2 48V24AH	48V60AH	↑ 48V60AH 48V30AH	24V30AH	↑ 24V30AH 24V15AH
Operating terrain type	Normal, Outdoor obstacle-crossing, climbing	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	IP54	IP67	IP54	IP67	IP22
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Selection Guide

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

Industry solution customization 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.



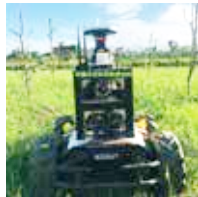
Support rapid secondary development and deployment

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°C	
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

Auto charging station (optional)



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

Auto charging station (optional)



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	64.5KG	Charging Time	1.5H
Speed	5.4km/h	Rated Voltage	48V
Ground Clearance	107mm	Battery Type	Lithium Battery
Minimum Turning Radius	0mm	Battery Parameters	48V24AH
Hub Radius	100mm	Output Voltage	48V
Parking Type	Electronic brake	Motor	Steering Drive Motor 100Wx4 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	7h

» 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



High Load Capacity



Independent suspension capable of ramp parking



400W dual-servo motor



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	42kg
Maximum Payload	50kg
Battery	24V30Ah lithium battery
Charging Time	3h
Max Travel	> 60Km
Motor type	350w*2 (Brushless DC motor)
Operating temperature	-10~40°C
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

» TITAN Ackermann Steering Series

The front and rear Ackerman chassis TITAN

TITAN excels in passability, stability, and flexibility, making it suitable for various industrial and logistics applications.



Applications:



Front and rear Ackerman chassis for agility



Electromagnetic parking brake for stability



10° climbing capability for rough terrain



Hot-swappable batteries for quick changes



120mm obstacle clearance for easy crossing

Specifications

Category	Specifications
Dimensions	1550mm x 980mm x 710mm
Wheelbase	860mm
Front/Rear Wheel Track	854mm
Mini Turning Radius	1.9m
Max Climbing Ability	10°(full load)
Mini Ground Clearance	160mm
Obstacle Clearance Height	100mm
Vehicle Weight	280KG
Speed	3m/s
Load Capacity	300KG
Battery Type	Single Battery 48V 24Ah
Power Drive Motor	Permanent Magnet Synchronous DC Motors 2X1000W
Steering Drive Motor	2X400W - DC Servo Motors 2X400W
Operating Temperature	-10~40°C
Protection Level	IP54
Communication Interface	CAN
Charging	Fast Battery Swapping/Manual Charging


» BUNKER Tracked Differential Steering Series

BUNKER PRO-Enhanced Tracked Chassis Robotics Development Platform


Super high off-road mobility for easily tackling challenging environments



 IP67 Solids Protection/Waterproof

 3h Long run time

 <math><30^\circ</math> Maximum gradeability

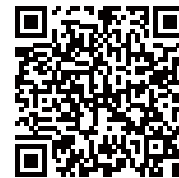
 120 KG Strong load capacity

 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°C~60°C
Suspension	Christie suspension + Matilda four-wheel balance suspension
Motor type	2×1500W 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
-  Zero Turn Radius
-  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	115mm
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

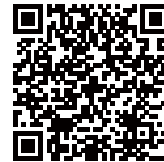
Applications: Industrial logistics robot, agricultural greenhouse robot, indoor service robots, etc.



"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-Indoor AGV

Tracer Mini can perform various tasks, such as 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)	420mmX412mmX195mm
Weight	18Kg-20Kg
MAX Speed	1.5m/s
Minimum Ground Clearance	30mm
Rated Load In Movement	40KG (Friction Coefficient 0.5 Ground Test)
Climbing Ability	<15°
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



Adding high precision antenna and VRTK



Standard autonomous driving open source development KIT



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

Specifications

Category		Specification	
Standard Hardware Configuration	Model	AUTOKIT	AUTOKIT PRO
	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

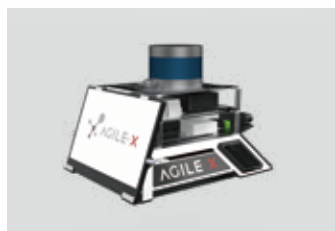
The ROS/Rviz/Gazebo/Nomachine ready development KIT customized for robotics education and industrial application development.



- 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 ROS2 Foxy 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-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 static obstacle 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	

» 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



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	ORBEC DaBai
	Industrial PC	NVIDIA Jetson Nano (4G)
	Voice module	IFLYTEK Voice Assistant/Google Assistant
	Trumpet	Left and right channels (2x2W)
Software	Monitor	7 inch 1024x600 touch screen
	Open source platform	ROS1/ROS2
Standard accessories	Communication protocol	UART
	Control method	APP
	Wheels included	Off-road wheel x4, Mecanum wheel x4, track x2

» LIMO PRO-ROS2 Robotics Platform

An open-source mobile robot with a modular robotic arm, commonly used in education, research, competitions, and various applications.



- 3D mapping
- Autonomous driving
- Obstacle avoidance
- Visual recognition
- Orin Nano
- 2.5hours battery life



Accessory sand box

Specifications

Product	Specification
Size	322*220*251mm
Weight	4.8KG
Payload	4KG
GC	24mm
Steering	40N · m
Max Speed	1m/s
Battery	10Ah 12V
OS	Ubuntu20.04
Version	ROS1 Noetic, ROS2 Foxy

» LIMO COBOT KIT-ROS Robotics Platform

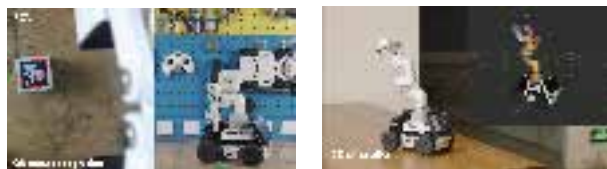
An open-source mobile robot with a modular robotic arm, commonly used in education, research, competitions, and various applications.



- Navigation, and Obstacle Avoidance
- SLAM Mapping
- Robotic Arm with Various Applications
- Supports ROS, Python, C++, C#



Accessory sand box



Specifications

Product	Specification
Weight	5.6KG
Navigation	Visual positioning, SLAM and Navigation
Precision	1-2cm
Arm Working Precision	0.5mm
Arm Working Radius	280mm
Payload	4KG (LIMO PRO)
	250G (Robotic arm)
Communication	USB
	TYPE C

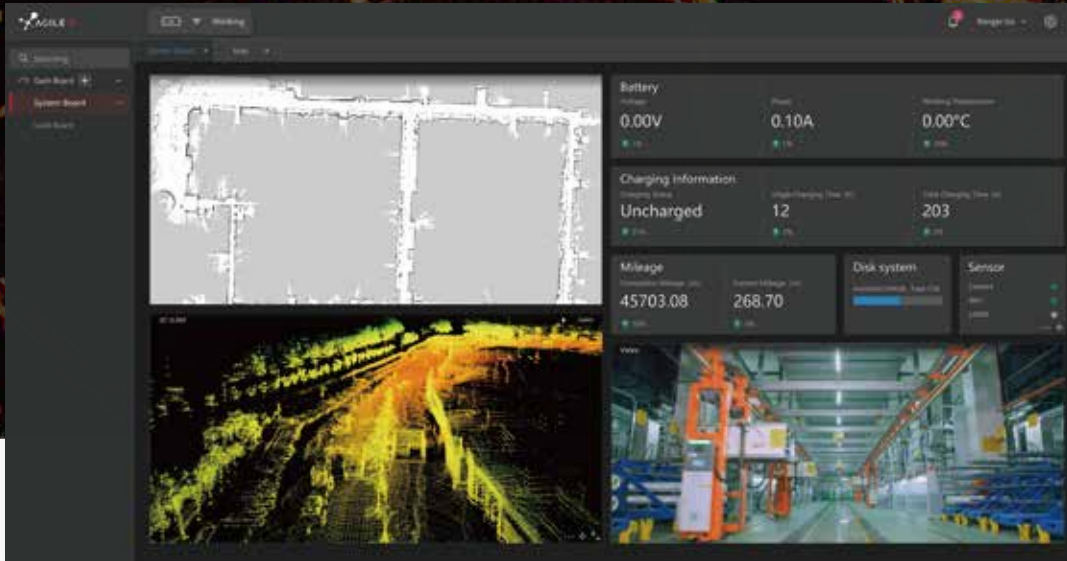
Automatic charging pile



Category		Parameters
Matched Battery Type		Lithium-Ion Battery
Charging Mode		CC/CV
Heat Sinking Method		Cool by Fan
Input	Range of Input Voltage	Rated range (200~240VAC) Adjustment range (200~264 VAC)When switching to 110V, the rated range is 100~120VAC
	Range of Input Frequency	47-63Hz
	Power Factor	PF>0.65/200-240VAC(when fully loaded)
	Efficiency	90%min.@220VAC
	Input AC Current	15Amax. @200Vac input & Full load 20Amax. @200Vac input & Full load
Output	Rated Voltage	54.75V
	Rated Current	20A
	Rated Power	1095W
	Voltage Precision	± 0.2
	Standby Power	≤10W
Protection	Short Circuit/Reverse Battery Polarity	The power / battery is properly connected.
	Current /Over Load /Under voltage	Once the issue is resolved, normal operations can resume.
	Over Voltage	the voltage exceeds 1.15-1.25 times the rated level, the power supply safeguards itself and returns to normal when the issue is fixed.
	Over Temperature	When the transformer core temperature surpasses 85°C, the charger's current is halved. It goes back to normal once it cools down.
Environment	Operating Temperature	-25°C~+40°C
	Operating Humidity	10~95%RH, non-condensing. 10~95%RH, no condensation.
	Storage Temperature Humidity	-40° C~+80° C,10-95%RH
	Operating Altitude	2000m
	Non-Operating Altitude	10000m

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.

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.

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.

Strong compatibility

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

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.

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."



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