

## **STUDY GOAL AND OBJECTIVES**

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

## **REPORT OBJECTIVES**

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

## **METHODOLOGY**

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

## **INFORMATION SOURCES**

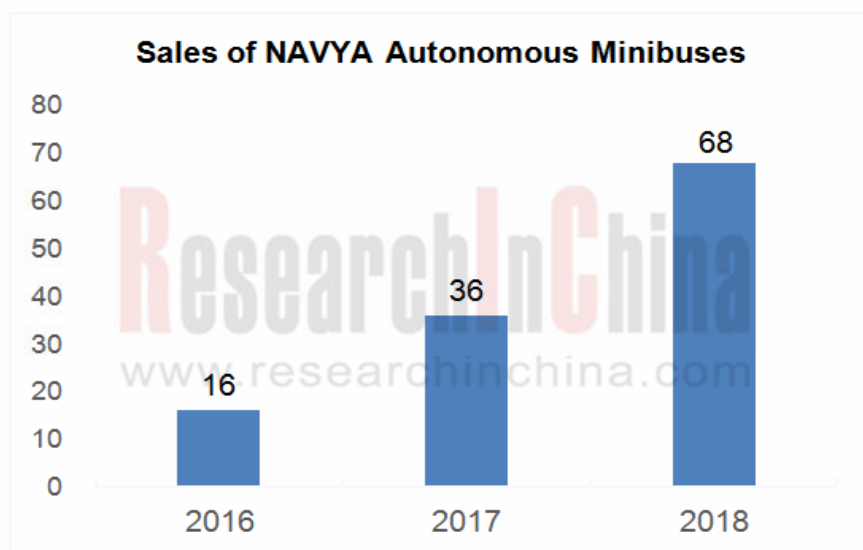
The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

## Abstract

### Low-speed Autonomous Driving Industry: Sales of Low-speed Autonomous Vehicles will Reach 11,000 Units in China in 2020

L4 and above autonomous driving suffers a setback but low-speed autonomous driving industry is advancing at a steady and fast pace.

NAVYA, an autonomous minibus trailblazer, performed poorly in sales, far less than that of Baidu Apolong.

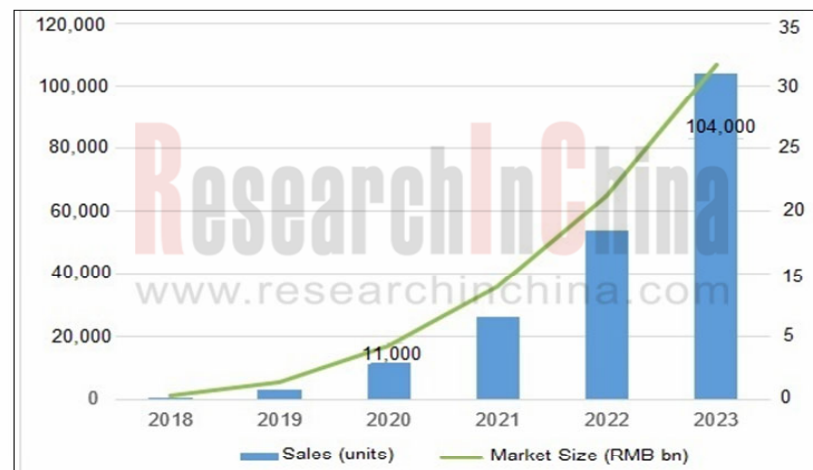


But there is no doubt that 2019 will see robust sales of low-speed autonomous vehicle. Nuro.ai which runs low-speed self-driving delivery pods, raised \$940 million from SoftBank Vision Fund, with which it will strenuously scale up its AV fleets.

Baidu expects 10,000 Apollo-enabled L4 AVs in 2019, most of which will be low-speed ones. Idriveplus plans to produce 1,200 low-speed self-driving vehicles in 2019.

On our conservative estimate, 11,000 low-speed AVs including self-driving passenger cars, low-speed autonomous trucks and autonomous working vehicles, will be sold in China in 2020, and the sales figure will soar to 104,000 units in 2023.

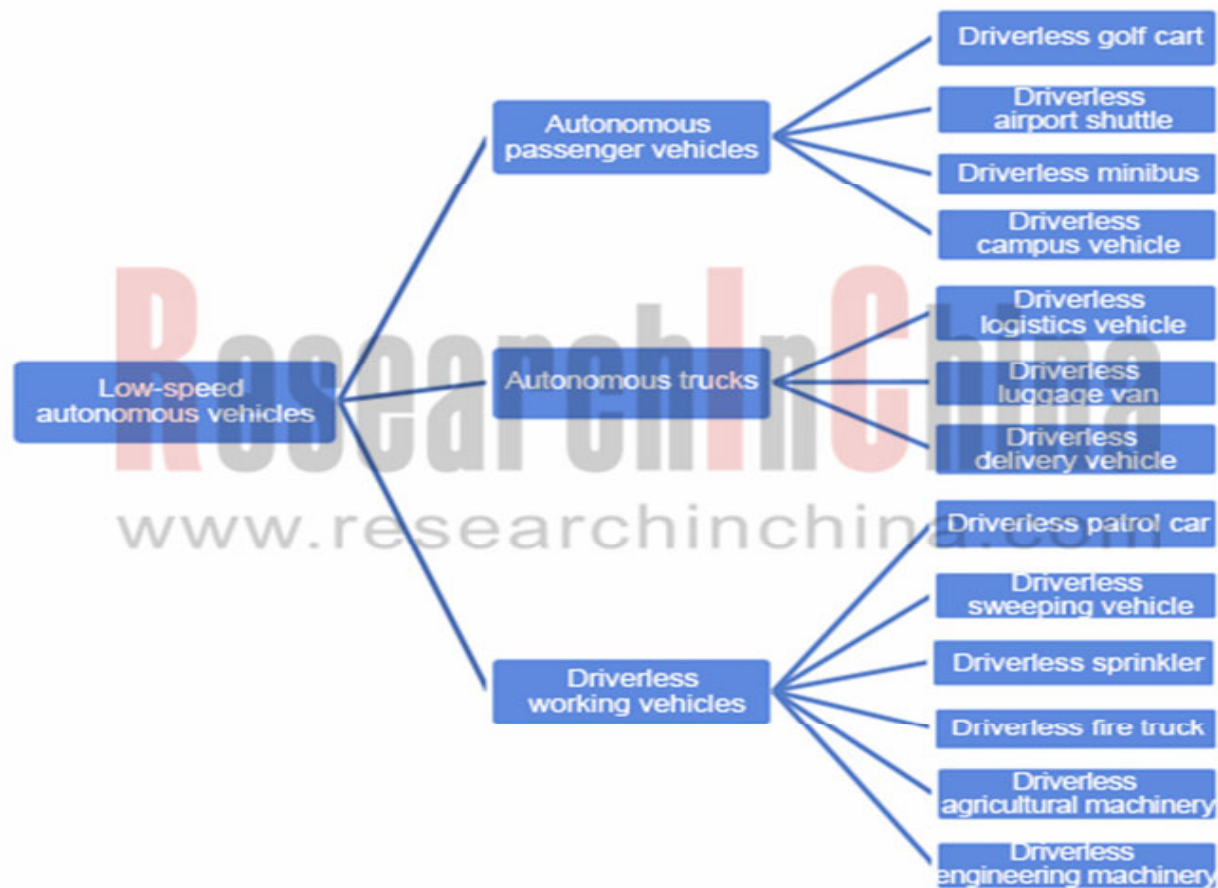
Low-speed Autonomous Vehicles Sales and Market Size in China, 2018-2023E



Source: ResearchInChina

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## Classification of Low-speed Autonomous Vehicles



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Foreign low-speed autonomous vehicle firms are energetically dedicated to passenger cars while their Chinese peers focus on low-speed trucks.

In 2017, global food and parcel delivery market was valued at a staggering \$400 billion, including roughly \$80 billion of “last-mile” delivery market. Eighty percent of packages will be delivered by autonomous vehicles in the next decade, as is predicted by McKinsey.

Driverless delivery vehicle market will therefore be a tipping point of the low-speed autonomous driving market, where the key players include Nuro.ai, Starship, Auto X, Idriverplus, Neolix, Suning, Meituan, JD, Cainiao, Navibook, and Aisimba.

Yet, the promising driverless delivery vehicles are confronted with challenges as follows:

**(a) High costs in early R&D and expensive maintenance cost.**

Due to technical and legal constraints, the self-driving vehicle without exception needs a safety officer, and even a security guard driving a car behind the driverless delivery vehicle.

**(b) Public acceptance and policy barriers.**

Many Americans protest against small autonomous delivery vehicle, complaining about its infringement of people’s rights of way now that the sidewalks are regularly encroached. Consequently, the number of self-driving delivery vehicles running on road is to be limited in the United States. In China, the autonomous delivery vehicle has to be allowed with a license, and the policy is being discussed and waits to be drafted, and the issuance of permits is impossible for the moment. Related standards are anticipated to be set down within 2019.

**(c) Still immature technologies and expensive products.**

A large number of autonomous vehicles fail to suit traffic environment on public roads and the real open road conditions are more complicated than those in communities and parks. Product stability desires to be tested.

**(d) Vulnerability to damages.**

Like bike-sharing, the self-driving delivery vehicle will be readily destroyed by the immoralist and the deliveries will be possibly stolen if unattended.

Despite those aforementioned, the autonomous delivery vehicle is an irresistible trend, being expedited by the technical competence, channel distribution system and existing market resources of the key players.

The To B market is faced with not so many legal restrictions and damages as the To C market.

In October 2018, Cowarobot and Zoomlion co-founded a joint-stock subsidiary – Cowarobot Zoomlion Intelligence Technology Co., Ltd which is primarily focused on driverless sweepers, and they will lavish a total of at least RMB1 billion for mass-production of autonomous commercial vehicle, modification of production lines, operation of commercial fleets, among others.



The To B market features not so fierce competition. Beijing I-tage Technology Co., Ltd is engrossed in the driverless mining vehicle market; HiGo Automotive collaborated with UNIS to roll out indoor self-driving floor scrubber; Zoomlion partnered with Landing.AI (established by Andrew Ng) to develop autonomous agricultural machinery; UISEE launched autonomous luggage vehicle.

ADAS and Autonomous Driving Industry Chain Report, 2018-2019 of ResearchInChina covers following 17 reports:

- 1) **Global Autonomous Driving Simulation and Virtual Test Industry Chain Report, 2018-2019**
- 2) **China Car Timeshare Rental and Autonomous Driving Report, 2018-2019**
- 3) **Report on Emerging Automakers in China, 2018-2019**
- 4) **Global and China HD Map Industry Report, 2018-2019**
- 5) **Global and China Automotive Domain Control Unit (DCU) Industry Report, 2018-2019**
- 6) **Global and China Automated Parking and Autonomous Parking Industry Report, 2018-2019**
- 7) **Cooperative Vehicle Infrastructure System (CVIS) and Vehicle to Everything (V2X) Industry Report, 2018-2019**
- 8) **Autonomous Driving High-precision Positioning Industry Report, 2018-2019**
- 9) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– Processor**
- 10) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– Automotive Lidar**
- 11) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– Automotive Radar**
- 12) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– Automotive Vision**
- 13) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– Passenger Car Makers**
- 14) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– System Integrators**
- 15) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– Commercial Vehicle Automated Driving**
- 16) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– Low-speed Autonomous Vehicle**
- 17) **ADAS and Autonomous Driving Industry Chain Report, 2018-2019– L4 Autonomous Driving**

**1 Low-speed Autonomous Driving Industry**

- 1.1 Definition of Low-speed Autonomous Vehicle
- 1.2 Classification of Low-speed Autonomous Vehicle
- 1.3 Paths for Implementation of Autonomous Driving
- 1.4 Dozens of Entrants at Home and Abroad
- 1.5 Business Models of Autonomous Minibuses
- 1.6 Trial Operation of Various Low-speed Autonomous Vehicles in the United States
- 1.7 Trial Operation of Low-speed Passenger Vehicle in China
- 1.8 Trial Operation of Low-speed Truck and Autonomous Delivery Vehicle Worldwide

**2 Low-speed Autonomous Driving Market**

- 2.1 Global Autonomous Minibus Market Size in 2018-2025 - Quantity
- 2.2 Global Autonomous Minibus Market Size in 2018-2025 - Value
- 2.3 Autonomous Minibus Market Segment: Private Transportation
- 2.4 Autonomous Minibus Market Segment: Public Transportation
- 2.5 Competitive Landscape: Current Major Competitors
- 2.6 Competitive Landscape: Potential Competitors
- 2.7 Forecast for China's Low-speed Autonomous Driving Market Size

**3 Global Low-speed Autonomous Passenger Vehicle Enterprises**

- 3.1 Transdev
  - 3.1.1 Profile
  - 3.1.2 Autonomous Driving Operation Cases
  - 3.1.3 Three Operation Modes of Autonomous Buses
  - 3.1.4 Role and Technical Partners of Transdev
  - 3.1.5 Car-hailing APP
  - 3.1.6 Important Partners

- 3.2 Nava
  - 3.2.1 Profile
  - 3.2.2 Development Course
  - 3.2.3 AUTONOM SHUTTLE
  - 3.2.4 Autonom CAB
  - 3.2.5 Performance
  - 3.2.6 Main Partners in Value Chain
- 3.3 Local Motors
  - 3.3.1 Profile
  - 3.3.2 Test Projects
  - 3.3.3 Cooperation with Goodyear
- 3.4 Auro Robotics
  - 3.4.1 Profile
  - 3.4.2 Main Products and Technologies
- 3.5 May Mobility
  - 3.5.1 Profile
  - 3.5.2 Latest Progress
- 3.6 2getthere
  - 3.6.1 Profile
  - 3.6.2 Main Projects
- 3.7 BestMile
  - 3.7.1 Profile
  - 3.7.2 Mobile Service Platform for Autonomous Driving
  - 3.7.3 Major Customers and Projects
  - 3.7.4 Deployment Location of Autonomous Vehicles
- 3.8 Easy Mile
  - 3.8.1 Profile

- 3.8.2 Second-generation EZ10
- 3.8.3 Main Projects
- 3.8.4 Projects in China and the United States
- 3.9 SB Drive
  - 3.9.1 Profile
  - 3.9.2 Development Course
- 3.10 ohmio
  - 3.10.1 Profile
  - 3.10.2 Main Products
  - 3.10.3 Low-speed Autonomous Vehicles
- 3.11 e.go Mobile
  - 3.11.1 Profile
  - 3.11.2 Low-speed Autonomous Vehicles
  - 3.11.3 Cooperation with Transdev and ZF
- 3.12 Coast Autonomous
  - 3.12.1 Profile
  - 3.12.2 Road Tests
- 3.13 Optimus Ride
  - 3.13.1 Profile
  - 3.13.2 Technologies and Products
  - 3.13.3 Latest Progress
- 3.14 Udelv

#### **4 Chinese Low-speed Autonomous Passenger Vehicle Enterprises**

- 4.1 Apolong
  - 4.1.1 Company Profile
  - 4.1.2 Profile of Apolong

- 4.1.3 “MiniBus- Autonomous Shuttle”
- 4.1.4 “MicroCar-Autonomous Working Vehicle”
- 4.1.5 Fleet Management Platform
- 4.1.6 Vehicle Infrastructure Cooperative Systems (VICS)
- 4.2 Magride
  - 4.2.1 Profile
  - 4.2.2 Main Technology
  - 4.2.3 Product Roadmap
  - 4.2.4 Product Test
  - 4.2.5 Success Cases
- 4.3 Falcon Image
  - 4.3.1 Autonomous Driving Roadmap
  - 4.3.2 Main Products
  - 4.3.3 Other Derivative Autonomous Models
- 4.4 eCHIEV
  - 4.4.1 Profile
  - 4.4.2 Business Progress
  - 4.4.3 Autonomous Park Vehicles and Implementation
- 4.5 DeepBlue Technology
  - 4.5.1 Autonomous Driving Roadmap
  - 4.5.2 Main Products

#### **5 Global Low-speed Autonomous Cargo Vehicle Enterprises**

- 5.1 Nuro.ai
  - 5.1.1 Profile
  - 5.1.2 Development History
  - 5.1.3 Delivery Services by Autonomous Vehicle



- 5.2 Einride
  - 5.2.1 Profile
  - 5.2.2 Autonomous Driving Configuration of T-pod
  - 5.2.3 Basic Performance Indicators of T-log
  - 5.2.4 Commercialization
- 5.3 Starship
  - 5.3.1 Profile
  - 5.3.2 Development Course and Parcel Delivery Services
  - 5.3.3 Food Delivery Services
- 5.4 Auto X
  - 5.4.1 Profile
  - 5.4.2 Main Products
  - 5.4.3 Low-speed Autonomous Vehicles
  - 5.4.4 Strategic cooperation with ZTO Express

### **6 Chinese Low-speed Autonomous Cargo Vehicle Enterprises**

- 6.1 Idriveplus
  - 6.1.1 Profile
  - 6.1.2 Development Course
  - 6.1.3 Low-speed Autonomous Driving Solutions
  - 6.1.4 WOBIDA (Ω)
  - 6.1.5 Challenges to Autonomous Delivery Vehicle
  - 6.1.6 Application Case and Promotion Plan
- 6.2 UISEE
  - 6.2.1 Profile
  - 6.2.2 Products and Technologies
  - 6.2.3 Autonomous Luggage Logistics Vehicle

- 6.3 Forwardx Robotics
  - 6.3.1 Profile
  - 6.3.2 Development Course
  - 6.3.3 Main Products
- 6.4 Neolix
  - 6.4.1 Profile
  - 6.4.2 Mini Logistics Vehicle
  - 6.4.3 Software Technology
  - 6.4.4 Production and Promotion of Autonomous Logistics Vehicle
- 6.5 SUNING
  - 6.5.1 Profile
  - 6.5.2 Main Products
  - 6.5.3 Operation of Autonomous Vehicle
  - 6.5.4 Joining Apollo Alliance
- 6.6 Meituan
  - 6.6.1 Profile
  - 6.6.2 Business Development Course and Planning
  - 6.6.3 Joining BDD
  - 6.6.4 Release of Autonomous Delivery Open Platform
- 6.7 JD X Business Division
  - 6.7.1 JD Terminal Delivery Robot
  - 6.7.2 Development History of Autonomous Vehicle
  - 6.7.3 Autonomous Vehicle Layout
  - 6.7.4 JD Autonomous Vehicle Settled in Changsha
  - 6.7.5 JD Robot Intelligent Distribution Station
- 6.8 Cainiao
  - 6.8.1 Profile
  - 6.8.2 Product Line

6.8.3 Main Functions

6.8.4 Latest Progress

6.9 Navibook

6.9.1 Profile

6.9.2 Strategic Planning

6.10 Aisimba

6.10.1 Profile

6.10.2 Main Products and Technologies

6.10.3 Autonomous Logistics Distribution Vehicle

### **7 Autonomous Working Vehicle Enterprises**

7.1 COWAROBOT

7.1.1 Profile

7.1.2 Main Technologies

7.1.3 Collaboration with Zoomlion to Deploy Autonomous Sanitation Vehicle

7.2 autowise.ai

7.2.1 Profile

7.2.2 Main Products

7.2.3 Product Test

7.3 Zoomlion

7.3.1 Profile

7.3.2 Intelligent Agriculture and Autonomous Driving

7.3.3 Main Autonomous Driving Technologies for Agricultural Machinery

7.3.4 Joint R&D with Landing.AI

7.4 HiGo Automotive

7.4.1 Profile

7.4.2 Low-cost Autonomous Sweepers

7.4.3 Joint Promotion of Indoor Automatic Sweepers with United Industrial Services

7.5 i-Tage Technology

7.5.1 Profile

7.5.2 Development Course

7.5.3 Applied Scenarios of i-Tage Autonomous Robot

7.5.4 Application in Mining Vehicles

7.5.5 Application Cases of Autonomous Mining Trucks

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