



Global and China Automotive Night Vision System Industry Report, 2016-2020

Aug. 2016

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

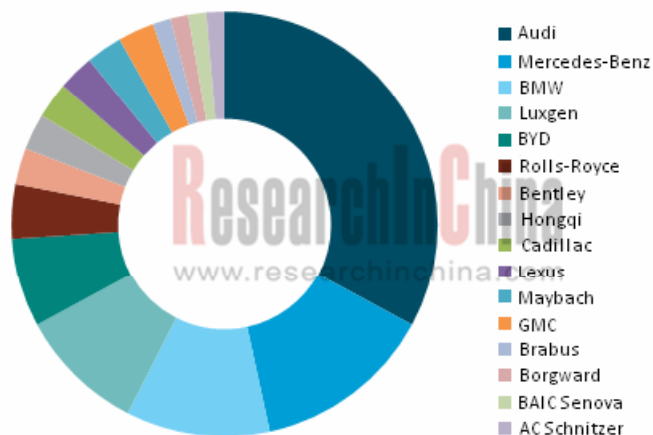
The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

Night vision system can solve the vision problem in night driving and thus is the first to be used in Mercedes-Benz, BMW, Audi, as well as other luxury cars such as Rolls-Royce Ghost/Wraith, Cadillac CT6, Lexus LS/GS and Maybach S Class. As the core part detector is costly, night vision system hasn't been popularized yet. According to the survey, in 2016, the penetration rate of global automotive night vision system is only 0.47%, of which, Mercedes-Benz, Audi and BMW boast the highest assembly volume, Autoliv serves as the uppermost system provider, and FLIR is the primary supplier of thermal infrared imagers.

In China, night vision system is mainly assembled in imported cars of luxury brands e.g. Mercedes-Benz, BMW, Rolls-Royce, Bentley, as well as domestically made models e.g. Dongfeng Yulon Luxgen, Hongqi H7, BYD SIRUI, registering a low penetration rate of 0.05% in 2016. Among them, Audi, Mercedes-Benz, BMW and Luxgen have relatively high assembly volume.

Night Vision System Assembled Car Brands for Sale in China, 2016



Source: Global and China Automotive Night Vision System Industry Report, 2016-2020 by ResearchInChina

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Global automotive night vision system suppliers are mainly Autoliv, Delphi, Bosch, Valeo and Visteon. Autoliv as the biggest one serves primarily Audi and BMW and accounts for roughly 60% of the market share. In 2016, Autoliv has launched the third-generation night vision solutions, which is said to be the world's first night vision system that can detect traffic danger and living things in total darkness or fog.

In China, local night vision system manufacturers are mainly Protruly Vision Technology Group (PROTRULY), Wuhan Guide Infrared Co., Ltd, Zhejiang Dali Technology Co., Ltd., etc. Among them, PROTRULY is engaged in the development of active infrared technology, while Guide Infrared and Dali Technology specialize in passive infrared night vision system. Due to different technical solutions, PROTRULY's products are sold at more competitive price, as low as RMB5,000; whereas, passive infrared night vision system is still priced above RMB10,000. Guide Infrared and Dali Technology are aiming at R&D for detector, planning to reduce product cost by utilizing localization. For example, Guide Infrared has built an 8-inch 0.25-micron uncooled infrared detector production line with independent intellectual property rights; upon reaching its design capacity, the company's detector price is expected to be lowered to 1/3 of the imports.

In the future, with the growth of ADAS market, night vision system will usher in new development opportunities, resulting in fast-growing demand but also a change in product form e.g. fusion as a function of driving safety assistance system, integration with HUD and intelligent headlamp. Besides, whether active or passive night vision systems the technical defects haven't been effectively improved, without ruling out the possibility of being replaced by other technologies such as millimeter-wave radar and camera in years to come.

The report provides the following:

- Structure, technical solution, development characteristics and trends of automotive night vision system;
- Penetration rate, assembly volume, market size, competition pattern and trends of global night vision system;
- Penetration rate, assembly volume, market size, development characteristics and trends of Chinese night vision system;
- Development of night vision system industry chain, including market size and competition pattern of the downstream – ADAS and the upstream-thermal infrared imager;
- Analysis on global and Chinese automotive night vision system enterprises, including profile, financial condition, characteristics of night vision system products, development planning, and more.

1 Introduction to Automotive Night Vision System

- 1.1 Product Definition
- 1.2 Product Structure
- 1.3 Technical Solution
- 1.4 Technical Costs

2 Global Market

- 2.1 Market Size
- 2.2 Product Features of Major Enterprises
 - 2.2.1 BMW
 - 2.2.2 Mercedes-Benz
 - 2.2.3 Audi
 - 2.2.4 Honda
 - 2.2.5 GM
 - 2.2.6 Toyota
 - 2.2.7 Hongqi
 - 2.2.8 Yulon
 - 2.2.9 BYD
- 2.3 Assembling Conditions

2.4 Competition Pattern

2.5 Trends

3 Chinese Market

- 3.1 Assembling Conditions
 - 3.1.1 Characteristics of Brand
 - 3.1.2 Characteristics of Price
 - 3.1.3 Assembly Volume
- 3.2 Market Size
- 3.3 Market Structure
- 3.4 Product Price
- 3.5 Enterprises Layout
- 3.6 New Entrants

4 Industry Chain

- 4.1 Downstream – ADAS
 - 4.1.1 Definition & Classification
 - 4.1.2 Market Size
 - 4.1.3 Sensor
- 4.2 Upstream –Thermal Infrared Imager

4.2.1 Product Structure

4.2.2 Cost Structure

4.2.3 Market Size

4.2.4 Competition Pattern

5 Global Enterprises

- 5.1 Autoliv
 - 5.1.1 Profile
 - 5.1.2 Operation
 - 5.1.3 Customers
 - 5.1.4 Night Vision Systems
- 5.2 Delphi
 - 5.2.1 Profile
 - 5.2.2 Operation
 - 5.2.3 Night Vision Systems
- 5.3 Visteon
 - 5.3.1 Profile
 - 5.3.2 Operation
 - 5.3.3 Night Vision Systems
- 5.4 Bosch

5.4.1 Profile	6.1.5 Raw Materials	6.4.2 Automotive Night Vision Products
5.4.2 Operation	6.1.6 Night Vision Systems	6.5 Zhejiang Dali Technology Co., Ltd.
5.4.3 Night Vision Systems	6.1.7 Detector Development	6.5.1 Profile
5.5 Valeo	6.1.8 Development Strategy	6.5.2 Operation
5.5.1 Profile	6.2 Jiangsu Kinzo Opto-electronic Instrument Co., Ltd.	6.5.3 Revenue Structure
5.5.2 Operation	6.2.1 Profile	6.5.4 Production & Sales
5.5.3 Night Vision Systems	6.2.2 Operation	6.5.5 Projects under Construction
5.5.4 Partners	6.2.3 Customers & Suppliers	6.5.6 R&D Costs
5.6 FLIR	6.2.4 Night Vision Systems	6.5.7 Detector R&D
5.6.1 Profile	6.3 Protruly Vision Technology Group	6.5.8 Purchasing & Sales Model
5.6.2 Operation	6.3.1 Profile	6.6 Hubei Jiuzhiyang Infrared System Co., Ltd
5.6.3 Night Vision Systems	6.3.2 Operation	6.6.1 Profile
6 Chinese Enterprises	6.3.3 Automotive Night Vision Products	6.6.2 Revenue & Profit
6.1 Wuhan Guide Infrared Co., Ltd	6.3.4 Inventory & Sales	6.6.3 Capacity, Production & Sales
6.1.1 Profile	6.3.5 Customers	6.6.4 Customers
6.1.2 Operation	6.3.6 Latest Product	6.6.5 Suppliers
6.1.3 Production & Sales	6.3.7 Competitive Advantages	6.7 North Night-Vision Science & Technology Group Co., Ltd.
6.1.4 R&D	6.4 Guangzhou SAT Infrared Technology Co., Ltd.	6.8 Xinxing Guangdian (XXGD)
	6.4.1 Profile	6.9 Guangdong Coagent Electronics S&T Co., Ltd.

- Significantly Improved Safety of Night Driving with Infrared Night Vision System
- Driver's Extended Visibility by Infrared Night Vision System
- Main Technical Solutions to Vehicle Night Vision System
- Comparison between Night Vision System Technologies
- Structure of Active Infrared Night Vision System
- Structure of Passive Infrared Night Vision System
- Comparison of Characteristics of Active and Passive Night Vision Systems
- Unit Price Comparison between Active and Passive Infrared Night Vision Systems
- Global Vehicle Active Safety Market Size, 2015-2018
- OEM Demand and Market Size of Vehicle Night Vision System Worldwide, 2014-2020E
- Car Models Equipped with Night Vision System in the World
- Night Vision System Names, Technology Roadmaps and Suppliers of World's Major OEMs
- Switch Position, Open Ways, Image Position and Camera Position of Night Vision Systems of World's Major OEMs
- Detection Range and Auxiliary Functions of Night Vision System of World's Major OEMs
- Key Suppliers of Vehicle Night Vision System in the World
- Competition Pattern of Global Vehicle Night Vision Systems, 2016
- Car Brands Equipped with Night Vision System Available on Chinese Market, 2016
- Car Brands and Models Equipped with Night Vision System Available on Chinese Market, 2016
- Price Distribution of Models with Standard Configuration of Night Vision System in China, 2016
- OEM Quantity and Assembly Rate of Night Vision System in China, 2016
- Proportion of Car Brands with OEM Night Vision System in China, 2016
- Vehicle Models Pre-installed with Night Vision System and Volume of Registered Plates in China, 2016
- Demand and Market Size of Vehicle Night Vision System in China, 2016-2020
- Vehicle Night Vision System Market Structure (by Technology Roadmap) in China, 2016
- Cost Comparison between Far Infrared and Near Infrared Night Vision Systems

- Average Price of Vehicle Night Vision System in OEM and Aftermarket in China, 2016-2020
- Night Vision System Price of Protruly Vision Technology Group, 2014-2017
- Market Layout of Leading Vehicle Night Vision System Companies in China
- New Entrants in China's Vehicle Night Vision System Industry, 2015-2016
- Classification of ADAS
- Key Functions of ADAS
- Global ADAS Market Size, 2011-2020E
- China's ADAS Market Size, 2011-2020E
- Penetration Rate of Key ADAS Systems in Chinese Market, Jan.-Dec., 2015
- Functions and Merits & Demerits of Main Sensor Types
- Vehicle Active Infrared Imaging System
- Structure of Thermal Infrared Imager
- Development Trend of Infrared Thermal Imaging Detector
- Cost Structure of Thermal Infrared Imager
- Global Infrared Civil Market Size, 2013-2020E
- Global Civil Thermal Imager Market Share (by Enterprise)
- Revenue and Net Income of AUTOLIV, 2010-2015
- Gross Margin of AUTOLIV, 2010-2015
- Global Presence of AUTOLIV
- Distribution of AUTOLIV's Plants Worldwide
- Revenue Structure (by Product) of AUTOLIV, 2010-2015
- Revenue Structure (by Region) of AUTOLIV, 2010-2015
- Output (by Product) of AUTOLIV, 2009-2014
- Customers Contributing over 10% of AUTOLIV's Sales, 2011-2015
- AUTOLIV's Sales Proportions from Its Customers, 2015

- Technology Distribution of AUTOLIV
- ADAS Layout of AUTOLIV
- Workforce of Delphi, 2011-2015
- Key Financial Indexes of Delphi, 2013-2015
- Revenue Structure (by Division) of Delphi, 2011-2015
- Gross Margin (by Division) of Delphi, 2010-2015
- Main Growth Domains of Delphi's Divisions, 2016
- Delphi's Major Customers and Regional Distribution
- Delphi's Major Customers and Revenue Contribution Rates, 2015
- Six Hierarchies of Delphi's Automated Driving
- Delphi's Automated Driving Route
- Revenue and EBITDA of Visteon, 2015-2016
- Revenue Breakdown (by Region/Client/Product) of Visteon's Automotive Electronics Business, 2016Q1
- Visteon's Revenue in China, 2016Q1
- Products Provided by Visteon for to-be-launched New Vehicle Models, 2015-2016
- Workforce of BOSCH, 2010-2015
- Revenue and EBIT of BOSCH, 2010-2015
- Revenue Structure (by Division) of BOSCH, 2012-2015
- Revenue and EBIT of BOSCH's Automotive Division, 2012-2015
- Revenue Structure (by Region) of BOSCH, 2012-2015
- Revenue and Net Income of Valeo, 2010-2015
- Revenue Structure (by Division) of Valeo, 2010-2015
- Revenue Structure (by Region) of Valeo, 2010-2015
- Revenue Structure (by Market) of Valeo, 2010-2015
- Gross Margin of Valeo, 2010-2015

- Revenue of Valeo's CDA Division, 2010-2015
- Application of Valeo's ADAS used Cameras
- Valeo's CDA Camera Product Line
- Development
- Valeo's ADAS and Camera Solutions Roadmap
- Vehicle Models Equipped with Valeo 360VUE
- Cooperative Partners of Valeo
- Financial Data of FLIR, 2011-2016
- Revenue and Operating Income (by Application) of FLIR, 2016H1
- Revenue and Net Income of Wuhan Guide Infrared, 2010-2016
- Revenue Structure (by Product) of Wuhan Guide Infrared, 2014-2015
- Revenue Structure (by Region) of Wuhan Guide Infrared, 2014-2015
- Output and Sales Volume of Major Products of Wuhan Guide Infrared, 2014-2015
- R&D Investment of Wuhan Guide Infrared, 2014-2015
- Operating Costs and Gross Margins of Main Businesses of Wuhan Guide Infrared, 2014-2015
- Use of Raised Funds of Wuhan Guide Infrared
- Core Technologies of Jiangsu Kinzo Opto-electronic Instrument
- Revenue, Gross Margin and Net Income of Jiangsu Kinzo Opto-electronic Instrument, 2014-2015
- Revenue Breakdown (by Business) of Jiangsu Kinzo Opto-electronic Instrument, 2014-2015
- Top 5 Clients of Jiangsu Kinzo Opto-electronic Instrument, 2015
- Top 5 Suppliers of Jiangsu Kinzo Opto-electronic Instrument, 2015
- Sources of Core Technologies of Jiangsu Kinzo Opto-electronic Instrument
- Vehicle Night-vision Viewer Parameters of Jiangsu Kinzo Opto-electronic Instrument
- Revenue, Net Income and Gross Margin of Protruly Vision Technology Group, 2015-2016
- Quarterly Revenue of Protruly Vision Technology Group, 2013-2015

- Operating Revenue and Gross Margin (by Business) of Protruly Vision Technology Group, 2015
- Operating Revenue and Gross Margin (by Region) of Protruly Vision Technology Group, 2015
- Advantages of Active Infrared System of Protruly Vision Technology Group
- Inventories (by Product) of Protruly Vision Technology Group, 2014-2015
- Sales Volume (by Product) of Protruly Vision Technology Group, 2014-2015
- Key Customers of Protruly Vision Technology Group
- Top 5 Clients for Vehicle Vision Business of Protruly Vision Technology Group, 2015
- Main Functions of “Smart Driving Series Products” of Protruly Vision Technology Group
- Parameters of Embedded In-vehicle Night-vision Viewer of Guangzhou SAT Infrared Technology
- Parameters of Externally Placed In-vehicle Night-vision Viewer of Guangzhou SAT Infrared Technology
- Revenue and Net Income of Zhejiang Dali Technology, 2010-2016
- Operating Revenue Structure (by Product) of Zhejiang Dali Technology, 2010-2015
- Operating Revenue (by Region) of Zhejiang Dali Technology, 2010-2015
- Output, Sales Volume and Inventory of Thermal Infrared Imagers of Zhejiang Dali Technology, 2013-2015
- Key Projects under Construction of Zhejiang Dali Technology, 2015
- R&D Costs and % of Total Revenue of Zhejiang Dali Technology, 2013-2015
- Focal Plane Detector Development History of Zhejiang Dali Technology
- Revenue and Profit of Hubei Jiuzhiyang Infrared System, 2013-2015
- Revenue Breakdown (by Product) of Hubei Jiuzhiyang Infrared System, 2013-2015
- Capacity and Output of Hubei Jiuzhiyang Infrared System, 2013-2015
- Sales Volume of Main Products of Hubei Jiuzhiyang Infrared System, 2013-2015
- Top 5 Clients for Civil Products of Hubei Jiuzhiyang Infrared System, 2013-2015
- Hubei Jiuzhiyang Infrared System’s Procurement from Top 5 Suppliers, 2013-2015
- Main Suppliers of Hubei Jiuzhiyang Infrared System
- In-vehicle Thermal Infrared Imager of Hubei Jiuzhiyang Infrared System

- Parameters of In-vehicle Thermal Infrared Imager of Hubei Jiuzhiyang Infrared System
- Subordinate Enterprises of North Night-Vision Science & Technology Group
- Night Vision Effect of North Night-Vision Science & Technology Group
- Product Patents of North Night-Vision Science & Technology Group
- Revenue, Net Income and Gross Margin of Guangdong Coagent Electronics S&T, 2014-2015
- Revenue Breakdown (by Business) of Guangdong Coagent Electronics S&T, 2014-2015

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