

Non-MEMS Sensors Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 -2034

https://marketpublishers.com/r/N2E91D08AE59EN.html

Date: April 2025 Pages: 185 Price: US\$ 4,850.00 (Single User License) ID: N2E91D08AE59EN

Abstracts

The Global Non-MEMS Sensors Market was valued at USD 138.7 billion in 2024 and is estimated to grow at a CAGR of 8.3% to reach USD 302.6 billion by 2034. The market is on an upward trajectory, driven by the widespread demand for high-precision sensors across key sectors such as automotive, healthcare, industrial, and environmental monitoring. As the global shift toward automation, electrification, and digital health intensifies, the role of non-MEMS sensors in enabling next-gen technologies has become increasingly critical. These sensors are now at the core of transformative innovations, from self-driving cars to intelligent medical devices, enabling real-time data processing, safety enhancement, and operational efficiency. Businesses are prioritizing advanced sensing capabilities to gain competitive advantages, prompting manufacturers to invest heavily in R&D and scale their production capabilities. The rise of Industry 4.0, smart cities, and sustainable energy infrastructure further reinforces the demand for robust, reliable, and application-specific sensor technologies. With an everexpanding scope of end-user applications, the global non-MEMS sensors market is expected to witness significant technological evolution and business expansion over the coming decade.

This growth is primarily fueled by the expanding automotive sector and the rising adoption of medical wearables and digital healthcare technologies. The increasing demand for advanced driver-assistance systems (ADAS), autonomous vehicles, and electric cars has significantly boosted the need for non-MEMS sensors like LiDAR, radar, optical, and pressure sensors, which enhance vehicle safety and navigation. In the healthcare sector, the surge in remote patient monitoring and the growing prevalence of chronic diseases has driven the demand for biosensors, infrared sensors, and optical sensors used in non-invasive health monitoring devices.



The market is segmented by technology into analog and digital sensors. Analog sensors are projected to grow at a CAGR of 6.8% by 2034, as they remain crucial in applications requiring precise data collection. They are widely used in industrial automation, temperature control, and pressure measurement due to their stability and reliability in harsh conditions without complex signal processing. In terms of sensor types, the market includes acoustic, gas and chemical, motion and position, optical, pressure, and temperature sensors. Gas and chemical sensors are expected to reach USD 39 billion by 2034, driven by their critical role in industrial safety, environmental monitoring, and healthcare. The stringent environmental regulations and the focus on workplace safety are pushing for advanced sensing technologies in these areas.

U.S. Non-MEMS Sensors Market generated USD 65.5 billion in 2024, reflecting strong demand driven by the healthcare sector's growth and advancements in medical technology. The increasing adoption of remote patient monitoring, digital health solutions, and wearable devices has escalated the need for high-precision sensors to support these innovations.

Key players in the Global Non-MEMS Sensors Market include Texas Instruments, Honeywell, Analog Devices, TE Connectivity, and Infineon. Key strategies adopted by companies include focusing on technological innovation to develop advanced sensor solutions, investing in research and development for enhanced sensor performance, and expanding their product portfolios to meet diverse industry needs. Companies are also forming strategic partnerships and collaborations to strengthen their market presence.



Contents

CHAPTER 1 METHODOLOGY AND SCOPE

- 1.1 Market scope and definitions
- 1.2 Research design
- 1.2.1 Research approach
- 1.2.2 Data collection methods
- 1.3 Base estimates and calculations
- 1.3.1 Base year calculation
- 1.3.2 Key trends for market estimation
- 1.4 Forecast model
- 1.5 Primary research and validation
 - 1.5.1 Primary sources
 - 1.5.2 Data mining sources

CHAPTER 2 EXECUTIVE SUMMARY

2.1 Industry 360° synopsis

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
- 3.2 Industry impact forces
 - 3.2.1 Growth drivers
 - 3.2.1.1 Growing demand for smart sensors in consumer electronics
 - 3.2.1.2 Expansion of automotive industry
 - 3.2.1.3 Expansion of industry 4.0 and smart manufacturing
 - 3.2.1.4 Growth in medical wearables and digital healthcare adoption
 - 3.2.1.5 Increasing use of advanced sensors in aerospace & defense
- 3.2.2 Industry pitfalls and challenges
 - 3.2.2.1 High cost of advanced sensors
 - 3.2.2.2 Complex integration with legacy systems
- 3.3 Growth potential analysis
- 3.4 Regulatory landscape
- 3.5 Technology landscape
- 3.6 Future market trends
- 3.7 Gap analysis
- 3.8 Porter's analysis

Non-MEMS Sensors Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034



3.9 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2024

- 4.1 Introduction
- 4.2 Company market share analysis
- 4.3 Competitive analysis of major market players
- 4.4 Competitive positioning matrix
- 4.5 Strategy dashboard

CHAPTER 5 MARKET ESTIMATES & FORECAST, BY SENSOR TYPE, 2021-2034 (USD BILLION & UNITS)

- 5.1 Key trends
- 5.2 Acoustic sensor
- 5.3 Gas & chemical sensor
- 5.4 Motion & position sensor
- 5.5 Optical sensor
- 5.6 Pressure sensor
- 5.7 Temperature sensor
- 5.8 Others

CHAPTER 6 MARKET ESTIMATES & FORECAST, BY TECHNOLOGY, 2021-2034 (USD BILLION & UNITS)

- 6.1 Key trends
- 6.2 Analog sensors
- 6.3 Digital sensors

CHAPTER 7 MARKET ESTIMATES & FORECAST, BY CONNECTIVITY, 2021-2034 (USD BILLION & UNITS)

- 7.1 Key trends
- 7.2 Wired sensors
- 7.3 Wireless sensors

CHAPTER 8 MARKET ESTIMATES & FORECAST, BY APPLICATION, 2021-2034 (USD BILLION & UNITS)

Non-MEMS Sensors Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034



- 8.1 Key trends
- 8.2 Monitoring
- 8.3 Navigation & positioning
- 8.4 Safety & security
- 8.5 Surveillance & detection
- 8.6 Tracking & asset management
- 8.7 Others

CHAPTER 9 MARKET ESTIMATES & FORECAST, BY END USE INDUSTRY, 2021-2034 (USD BILLION & UNITS)

- 9.1 Key trends
- 9.2 Aerospace & defense
- 9.3 Automotive & transportation
- 9.4 Consumer electronics
- 9.5 Energy & utilities
- 9.6 Healthcare
- 9.7 Industrial & manufacturing
- 9.8 Others

CHAPTER 10 MARKET ESTIMATES AND FORECAST, BY REGION, 2021 – 2034 (USD BILLION & UNITS)

10.1 Key trends 10.2 North America 10.2.1 U.S. 10.2.2 Canada 10.3 Europe 10.3.1 Germany 10.3.2 UK 10.3.3 France 10.3.4 Spain 10.3.5 Italy 10.4 Asia Pacific 10.4.1 China 10.4.2 India 10.4.3 Japan 10.4.4 ANZ 10.4.5 South Korea

Non-MEMS Sensors Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034



10.5 Latin America
10.5.1 Brazil
10.5.2 Mexico
10.6 Middle East and Africa
10.6.1 Saudi Arabia
10.6.2 South Africa
10.6.3 UAE

CHAPTER 11 COMPANY PROFILES

- 11.1 Allegro Microsystems
- 11.2 AMS-Osram
- 11.3 Analog Devices
- 11.4 Honeywell International
- 11.5 Infineon Technologies
- 11.6 Keyence
- 11.7 Murata Manufacturing
- 11.8 OmniVision Technologies
- 11.9 Omron
- 11.10 Panasonic
- 11.11 Sensirion
- 11.12 SICK
- 11.13 TE Connectivity
- 11.14 Texas Instruments
- 11.15 XJCSensor



I would like to order

Product name: Non-MEMS Sensors Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

Product link: https://marketpublishers.com/r/N2E91D08AE59EN.html

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/N2E91D08AE59EN.html