

North America Temperature Sensor Market Forecast to 2030 - Regional Analysis - by Type (Thermocouple, Resistance Temperature Detectors (RTD), Thermistor, Infrared, and Others), Connectivity (Wired and Wireless), and End Users (Semiconductor Manufacturing, Healthcare & Pharma, Food & Beverage, Data Center, Aerospace, Energy & Utilities, and Others)

<https://marketpublishers.com/r/NBAAA716E20BEN.html>

Date: March 2025

Pages: 173

Price: US\$ 3,450.00 (Single User License)

ID: NBAAA716E20BEN

Abstracts

The North America temperature sensor market was valued at US\$ 1,785.81 million in 2023 and is expected to reach US\$ 2,762.85 million by 2030; it is estimated to register a CAGR of 6.4% from 2023 to 2030.

Miniaturization of Temperature Sensors Fuels North America Temperature Sensor Market

Miniaturized devices play a crucial role in monitoring and controlling temperature in a wide range of applications such as medical, wearables, diagnostics, and automotive. Advancements in microelectromechanical systems (MEMS) and nanotechnology have enabled the development of smaller and more precise temperature sensors. These technologies allow seamless integration of temperature-sensing capabilities into smaller devices without hampering accuracy and reliability. Furthermore, market players are highly adopting advanced technologies and entering partnerships to meet industry-specific requirements. For instance, in May 2022, Heraeus Holding collaborated with accensors GmbH to jointly develop solutions that support the miniaturization trend. The companies are planning to integrate miniaturized temperature sensors into film sensors

to increase measurement accuracy. Moreover, the emergence of numerous other industries, including agriculture and environment monitoring, has surged the demand for miniaturized temperature sensors for monitoring soil conditions and climate change indicators. Thus, the rising demand for miniaturized temperature sensors is projected to drive the market soon.

North America Temperature Sensor Market Overview

The data center industry in North America has witnessed continued demand and growth in recent years. This growth in the data center industry in North America was majorly attributed to the substantial rise in demand from cloud providers. In the US, Texas, North California, and certain areas of San Antonio registered relatively higher cloud activity. However, the overall absorption and demand for data centers in the US and other prominent countries is growing. Various companies are launching new data centers in the region. For instance, in April 2023, Equinix announced plans to construct a new data center in Montreal, Canada. Also, in November 2023, Vertiv introduced Vertiv SmartMod Max CW, a prefabricated modular data center designed to address the growing demand for rapid deployment of computing. Temperature sensors continuously monitor the ambient temperature in different areas of the data center. Thus, with the increasing data centers, the demand for temperature sensors is also growing in the region.

The automotive industry in the region is growing significantly, boosting the demand for temperature sensors. The governments in the region are increasing their investments to boost their automotive manufacturing industry. In January 2021, the US President announced the plan to strengthen the US manufacturing sector under the "Made in America" initiative, which focused on making the manufacturing sector technologically advanced and automated. He announced an investment of US\$ 300 billion for the R&D and inclusion of advanced technologies to boost the country's production output, focusing on electric vehicle production. To meet the growing demand for temperature sensors in electric vehicles, various companies are launching new temperature sensors for the automotive industry in the region. For instance, in October 2023, in an ongoing effort to expand its product offering for the North American automotive aftermarket, AISIN introduced its OES Engine Coolant Temperature Sensors. The new products were unveiled at the 2023 AAPEX Show in Las Vegas. Thus, the temperature sensor market is growing significantly in North America.

North America Temperature Sensor Market Revenue and Forecast to 2030 (US\$ Million)

North America Temperature Sensor Market Segmentation

The North America temperature sensor market is categorized into type, connectivity, end user, and country.

Based on type, the North America temperature sensor market is segmented into thermocouple, resistance temperature detectors (RTD), thermistor, infrared, and others. The thermocouple segment held the largest share of North America temperature sensor market share in 2023.

In terms of connectivity, the North America temperature sensor market is bifurcated into wired and wireless. The wired segment held a larger share of North America temperature sensor market in 2023.

By end users, the North America temperature sensor market is segmented into semiconductor manufacturing, healthcare & pharma, food and beverage, data center, aerospace, energy & utilities, and others. The semiconductor manufacturing segment held the largest share of North America temperature sensor market in 2023.

By country, the North America temperature sensor market is segmented into the US, Canada, and Mexico. The US dominated the North America temperature sensor market share in 2023.

Texas Instruments Inc.; Siemens Ltd.; TE Connectivity Ltd.; Amphenol LTW Ltd.; Analog Devices Inc.; Emerson Electric Co.; Microchip Technology Inc.; Panasonic Corporation; Honeywell International, Inc.; and NXP Semiconductors N.V are some of the leading companies operating in the North America temperature sensor market.

Reason to buy

Save and reduce time carrying out entry-level research by identifying the growth, size, leading players, and segments in the North America temperature sensor market.

Highlights key business priorities in order to assist companies to realign their business strategies.

The key findings and recommendations highlight crucial progressive industry

trends in the North America temperature sensor market, thereby allowing players across the value chain to develop effective long-term strategies.

Develop/modify business expansion plans by using substantial growth offering developed and emerging markets.

Scrutinize in-depth North America market trends and outlook coupled with the factors driving the North America temperature sensor market, as well as those hindering it.

Enhance the decision-making process by understanding the strategies that underpin commercial interest with respect to client products, segmentation, pricing, and distribution.

The List of Companies - North America Temperature Sensor Market

Texas Instruments Inc.

Siemens Ltd.

TE Connectivity Ltd.

Amphenol LTW Ltd.

Analog Devices Inc.

Emerson Electric Co.

Microchip Technology Inc.

Panasonic Corporation

Honeywell International, Inc.

NXP Semiconductors N.V

Contents

1. INTRODUCTION

- 1.1 The Insight Partners Research Report Guidance
- 1.2 Market Segmentation

2. EXECUTIVE SUMMARY

- 2.1 Key Insights
- 2.2 Market Attractiveness

3. RESEARCH METHODOLOGY

- 3.1 Coverage
- 3.2 Secondary Research
- 3.3 Primary Research

4. TEMPERATURE SENSOR MARKET LANDSCAPE

- 4.1 Overview
- 4.2 Ecosystem Analysis
 - 4.2.1 List of Vendors in the Value Chain
- 4.3 Premium Insights
 - 4.3.1 Pricing Analysis by Type (US\$/Unit)
 - 4.3.2 Product Benchmarking by End Users

5. NORTH AMERICA TEMPERATURE SENSOR MARKET - KEY MARKET DYNAMICS

- 5.1 Market Drivers
 - 5.1.1 Growing Adoption Across Various Industries
 - 5.1.2 Increasing number of Data Centers
 - 5.1.3 Strategic Initiatives by Government
- 5.2 Market Restraints
 - 5.2.1 High Costs Associated with the Temperature Sensors
- 5.3 Market Opportunities
 - 5.3.1 Evolution of Industry 4.0
 - 5.3.2 Rising Demand for Wireless Temperature Sensors

5.4 Future Trends

5.4.1 Miniaturization of Temperature Sensors

5.5 Impact of Drivers and Restraints:

6. TEMPERATURE SENSOR MARKET - NORTH AMERICA ANALYSIS

6.1 Overview

6.2 Temperature Sensor Market Revenue (US\$ Million), 2020-2030

6.3 Temperature Sensor Market Forecast Analysis

7. NORTH AMERICA TEMPERATURE SENSOR MARKET ANALYSIS - BY TYPE

7.1 Thermocouple

7.1.1 Overview

7.1.2 Thermocouple: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

7.2 Resistance Temperature Detectors (RTD)

7.2.1 Overview

7.2.2 Resistance Temperature Detectors (RTD): Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

7.3 Thermistor

7.3.1 Overview

7.3.2 Thermistor: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

7.4 Infrared

7.4.1 Overview

7.4.2 Infrared: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

7.5 Others

7.5.1 Overview

7.5.2 Others: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

8. NORTH AMERICA TEMPERATURE SENSOR MARKET ANALYSIS - BY CONNECTIVITY

8.1 Wired

8.1.1 Overview

8.1.2 Wired: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$

Million)

8.2 Wireless

8.2.1 Overview

8.2.2 Wireless: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

9. NORTH AMERICA TEMPERATURE SENSOR MARKET ANALYSIS - BY END USERS

9.1 Semiconductor Manufacturing

9.1.1 Overview

9.1.2 Semiconductor Manufacturing: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

9.2 Healthcare and Pharma

9.2.1 Overview

9.2.2 Healthcare and Pharma: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

9.3 Food and Beverage

9.3.1 Overview

9.3.2 Food and Beverage: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

9.4 Data Center

9.4.1 Overview

9.4.2 Data Center: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

9.5 Aerospace

9.5.1 Overview

9.5.2 Aerospace: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

9.6 Energy and Utilities

9.6.1 Overview

9.6.2 Energy and Utilities: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

9.7 Others

9.7.1 Overview

9.7.2 Others: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

10. NORTH AMERICA TEMPERATURE SENSOR MARKET - COUNTRY ANALYSIS

10.1 North America Market Overview

10.1.1 North America: Temperature Sensor Market, By Key Country - Revenue 2023 (US\$ Million)

10.1.2 North America: Temperature Sensor Market - Revenue and Forecast Analysis - by Country

10.1.2.1 North America: Temperature Sensor Market - Revenue and Forecast Analysis - by Country

10.1.2.2 United States: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

10.1.2.2.1 United States: Temperature Sensor Market Breakdown, by Type

10.1.2.2.2 United States: Temperature Sensor Market Breakdown, by Connectivity

10.1.2.2.3 United States: Temperature Sensor Market Breakdown, by End Users

10.1.2.3 Canada: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

10.1.2.3.1 Canada: Temperature Sensor Market Breakdown, by Type

10.1.2.3.2 Canada: Temperature Sensor Market Breakdown, by Connectivity

10.1.2.3.3 Canada: Temperature Sensor Market Breakdown, by End Users

10.1.2.4 Mexico: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

10.1.2.4.1 Mexico: Temperature Sensor Market Breakdown, by Type

10.1.2.4.2 Mexico: Temperature Sensor Market Breakdown, by Connectivity

10.1.2.4.3 Mexico: Temperature Sensor Market Breakdown, by End Users

11. COMPETITIVE LANDSCAPE

11.1 Heat Map Analysis by Key Players

11.2 Company Positioning & Concentration

11.3 Market Share Analysis

11.4 Competitive Benchmarking

12. INDUSTRY LANDSCAPE

12.1 Overview

12.2 Market Initiative

12.3 Product Development

12.4 Mergers & Acquisitions

13. COMPANY PROFILES

13.1 Texas Instruments Inc.

- 13.1.1 Key Facts
- 13.1.2 Business Description
- 13.1.3 Products and Services
- 13.1.4 Financial Overview
- 13.1.5 SWOT Analysis
- 13.1.6 Key Developments

13.2 Siemens Ltd.

- 13.2.1 Key Facts
- 13.2.2 Business Description
- 13.2.3 Products and Services
- 13.2.4 Financial Overview
- 13.2.5 SWOT Analysis
- 13.2.6 Key Developments

13.3 TE Connectivity Ltd.

- 13.3.1 Key Facts
- 13.3.2 Business Description
- 13.3.3 Products and Services
- 13.3.4 Financial Overview
- 13.3.5 SWOT Analysis
- 13.3.6 Key Developments

13.4 Amphenol LTW Ltd.

- 13.4.1 Key Facts
- 13.4.2 Business Description
- 13.4.3 Products and Services
- 13.4.4 Financial Overview
- 13.4.5 SWOT Analysis
- 13.4.6 Key Developments

13.5 Analog Devices Inc.

- 13.5.1 Key Facts
- 13.5.2 Business Description
- 13.5.3 Products and Services
- 13.5.4 Financial Overview
- 13.5.5 SWOT Analysis
- 13.5.6 Key Developments

13.6 Emerson Electric Co.

- 13.6.1 Key Facts
- 13.6.2 Business Description

- 13.6.3 Products and Services
- 13.6.4 Financial Overview
- 13.6.5 SWOT Analysis
- 13.6.6 Key Developments
- 13.7 Microchip Technology Inc.
 - 13.7.1 Key Facts
 - 13.7.2 Business Description
 - 13.7.3 Products and Services
 - 13.7.4 Financial Overview
 - 13.7.5 SWOT Analysis
 - 13.7.6 Key Developments
- 13.8 Panasonic Corporation
 - 13.8.1 Key Facts
 - 13.8.2 Business Description
 - 13.8.3 Products and Services
 - 13.8.4 Financial Overview
 - 13.8.5 SWOT Analysis
 - 13.8.6 Key Developments
- 13.9 Honeywell International, Inc.
 - 13.9.1 Key Facts
 - 13.9.2 Business Description
 - 13.9.3 Products and Services
 - 13.9.4 Financial Overview
 - 13.9.5 SWOT Analysis
 - 13.9.6 Key Developments
- 13.10 NXP Semiconductors N.V.
 - 13.10.1 Key Facts
 - 13.10.2 Business Description
 - 13.10.3 Products and Services
 - 13.10.4 Financial Overview
 - 13.10.5 SWOT Analysis
 - 13.10.6 Key Developments

14. APPENDIX

- 14.1 Word Index
- 14.2 About the Insight Partners

List Of Tables

LIST OF TABLES

Table 1. Temperature Sensor Market Segmentation

Table 2. List of Vendors

Table 3. Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

Table 4. Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Type

Table 5. Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Connectivity

Table 6. Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by End Users

Table 7. North America: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Country

Table 8. United States: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Type

Table 9. United States: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Connectivity

Table 10. United States: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by End Users

Table 11. Canada: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Type

Table 12. Canada: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Connectivity

Table 13. Canada: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by End Users

Table 14. Mexico: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Type

Table 15. Mexico: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by Connectivity

Table 16. Mexico: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million) - by End Users

Table 17. Heat Map Analysis by Key Players

Table 18. Company Positioning & Concentration

Table 19. Competitive Benchmarking

Table 20. List of Abbreviation

List Of Figures

LIST OF FIGURES

- Figure 1. Temperature Sensor Market Segmentation, by Country
- Figure 2. Temperature Sensor Market - Key Market Dynamics
- Figure 3. Impact Analysis of Drivers and Restraints
- Figure 4. Temperature Sensor Market Revenue (US\$ Million), 2020-2030
- Figure 5. Temperature Sensor Market Share (%) - by Type (2023 and 2030)
- Figure 6. Thermocouple: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 7. Resistance Temperature Detectors (RTD): Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 8. Thermistor: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 9. Infrared: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 10. Others: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 11. Temperature Sensor Market Share (%) - by Connectivity (2023 and 2030)
- Figure 12. Wired: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 13. Wireless: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 14. Temperature Sensor Market Share (%) - by End Users (2023 and 2030)
- Figure 15. Semiconductor Manufacturing: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 16. Healthcare and Pharma: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 17. Food and Beverage: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 18. Data Center: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 19. Aerospace: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 20. Energy and Utilities: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)
- Figure 21. Others: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

Figure 22. North America: Temperature Sensor Market, By Key Country - Revenue 2023 (US\$ Million)

Figure 23. North America: Temperature Sensor Market Breakdown, by Key Countries, 2023 and 2030 (%)

Figure 24. United States: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

Figure 25. Canada: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

Figure 26. Mexico: Temperature Sensor Market - Revenue and Forecast to 2030 (US\$ Million)

Figure 27. Market Share Analysis

I would like to order

Product name: North America Temperature Sensor Market Forecast to 2030 - Regional Analysis - by Type (Thermocouple, Resistance Temperature Detectors (RTD), Thermistor, Infrared, and Others), Connectivity (Wired and Wireless), and End Users (Semiconductor Manufacturing, Healthcare & Pharma, Food & Beverage, Data Center, Aerospace, Energy & Utilities, and Others)

Product link: <https://marketpublishers.com/r/NBAAA716E20BEN.html>

Price: US\$ 3,450.00 (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/NBAAA716E20BEN.html>