Automotive Temperature Sensor Market Research Report - Forecast to 2023

Report Information
More information from: https://www.marketresearchfuture.com/reports/5683

Automotive Temperature Sensor Market Research Report - Forecast to 2023

Description:

Global Automotive Temperature Sensor Market Information Report by Application (Engine, Exhaust and Seats), Product Type (MEMS, IC sensors and Infrared Temperature Sensors), Vehicle Type (Passenger Car and Commercial Vehicle), and Region.

Market Scenario:

Vehicles become more sophisticated as they integrate sensors to detect internal and external operating conditions. The manufacturers are gaining competence in sensor technology to survive the competitive world of vehicle technology. Increase in awareness of temperature sensor technologies such as MEMs, IC sensors and Infrared sensors among the manufacturers are likely to improve the efficacy of the vehicle architecture. The manufacturers are testing new sensor technologies to measure the temperature gradient of engine parameters on different road conditions. Major parameters measured by the temperature sensors are passenger comfort, engine efficiency and performance.

The factors that are responsible for the growth of automotive temperature sensor market are engine control unit, stringent emission norms, rising need for fuel efficiency and improved vehicle safety. The manufacturer’s preference to understand the vehicle performance and operating condition is expected to drive the growth of automotive engine temperature sensor market during the forecast period. The stringent emission norms will enable the major automotive manufacturers to adopt latest detecting technologies such as infrared temperature sensors. The temperature sensor are mounted on the exhaust pipe, air duct, e-motor and battery to measure different parameters. Stringent government emission norms such as EURO-6, BHARAT stage-VI and US tier-2 regulations have forced OEMs to employ advanced sensor technology.

The automotive temperature sensor market is segmented based on applications, product type, and vehicle types. On the basis of application the market is segmented as engine, exhaust and seats. One of the major applications for temperature sensors in vehicle architecture is engine control management. The market is segmented based on product types as MEMS, IC sensor and Infrared temperature sensor. Furthermore, infrared sensors are gaining popularity in high-temperature applications. The market is segmented based on vehicle types as passenger vehicles and commercial vehicles. The number of applications of temperature sensors in passenger vehicles is higher as compared to commercial vehicles. Thus, the automotive temperature sensor market is expected to grow at approximately 6% CAGR during the period 2017 to 2023.
The market is segmented based on regions are America, Asia Pacific, Europe, and Rest of the World. Asia Pacific region is expected to dominate the market in future because of increased demand for automotive electronics in Japan and South Korea. Other potential markets for temperature sensors are the Americas due to rules and regulation imposed by the U.S. Environment Agency on manufacturers. Additionally, emerging countries such as Brazil and Russia will play a crucial role in increasing market share of the temperature sensor. On the whole, OEMs and Tier-1 suppliers are focusing on low cost and durable temperature sensor to measure high temperature. To manufacture high performance and reliable temperature sensor, the advanced technologies such as high-heat resistant materials, hybrid sensor solutions and nanotechnology will play a pivotal role.

**Key Players:**
The key players in automotive temperature sensor market are Robert Bosch (Germany), Aptiv PLC (U.K.), Continental (Germany), Panasonic (Japan), TDK Corporation (Japan), TE Connectivity Ltd (Switzerland), RoHM Co. Ltd. (Japan), Microchip Technology Inc. (U.S.), TT Electronics (U.K.), ZF TRW Automotive (U.S.) and RFMicron (U.S.).

The report for Global Automotive Temperature sensor Market of Market Research Future comprises extensive primary research along with the detailed analysis of qualitative as well as quantitative aspects by various industry experts, key opinion leaders to gain the deeper insight of the market and industry performance. The report gives the clear picture of current market scenario which includes historical and projected market size in terms of value and volume, technological advancement, macro economical and governing factors in the market. The report provides details information and strategies of the top key players in the industry. The report also gives a broad study of the different market segments and regions.

**Contents:**

<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
</tr>
<tr>
<td>1 Executive Summary</td>
</tr>
<tr>
<td>2 Scope of the Report</td>
</tr>
<tr>
<td>2.1 Market Definition</td>
</tr>
<tr>
<td>2.2 Scope of the Study</td>
</tr>
<tr>
<td>2.2.1 Definition</td>
</tr>
<tr>
<td>2.2.2 Research Objective</td>
</tr>
<tr>
<td>2.2.3 Assumptions</td>
</tr>
<tr>
<td>2.2.4 Limitations</td>
</tr>
</tbody>
</table>
2.3 Research Process
2.3.1 Primary Research
2.3.2 Secondary Research
2.4 Market size Estimation
2.5 Forecast Model

3 Market Landscape
3.1 Porter’s Five Forces Analysis
3.1.1 Threat of New Entrants
3.1.2 Bargaining power of buyers
3.1.3 Threat of substitutes
3.1.4 Segment rivalry
3.1.5 Bargaining Power of Buyers
3.2 Value Chain/Supply Chain Analysis

4 Market Dynamics
4.1 Introduction
4.2 Market Drivers
4.3 Market Restraints
4.4 Market Opportunities
4.5 Market Trends

5 Global Automotive Temperature sensor Market, By Application
5.1 Introduction
5.2 Engine
5.2.1 Market Estimates & Forecast, 2017-2023
5.2.2 Market Estimates & Forecast by Region, 2017-2023
5.3 Exhaust
5.3.1 Market Estimates & Forecast, 2017-2023
5.3.2 Market Estimates & Forecast by Region, 2017-2023
5.4 Seats
5.4.1 Market Estimates & Forecast, 2017-2023
5.4.2 Market Estimates & Forecast by Region, 2017-2023

6 Global Automotive Temperature sensor Market, By Product Type
6.1 Introduction
6.2 MEMS
6.2.1 Market Estimates & Forecast, 2017-2023
6.2.2 Market Estimates & Forecast by Region, 2017-2023
6.3 IC Sensors
6.3.1 Market Estimates & Forecast, 2017-2023
6.3.2 Market Estimates & Forecast by Region, 2017-2023
6.4 Infrared Temperature Sensors
6.4.1 Market Estimates & Forecast, 2017-2023
6.4.2 Market Estimates & Forecast by Region, 2017-2023

7 Global Automotive Temperature sensor Market, By Vehicle Type
7.1 Introduction
7.2 Passenger Car
7.2.1 Market Estimates & Forecast, 2017-2023
7.2.2 Market Estimates & Forecast by Region, 2017-2023
7.3 Commercial vehicle
7.3.1 Market Estimates & Forecast, 2017-2023
7.3.2 Market Estimates & Forecast by Region, 2017-2023
8 Global Automotive Temperature sensor Market, By Region
8.1 Introduction
8.2 North America
8.2.1 Market Estimates & Forecast, 2018-2023
8.2.2 Market Estimates & Forecast by Application, 2018-2023
8.2.3 Market Estimates & Forecast by Product Type, 2018-2023
8.2.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.2.5 The U.S.
8.2.5.1 Market Estimates & Forecast, 2018-2023
8.2.5.2 Market Estimates & Forecast by Application, 2018-2023
8.2.5.3 Market Estimates & Forecast by Product Type, 2018-2023
8.2.5.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.2.6 Canada
8.2.6.1 Market Estimates & Forecast, 2018-2023
8.2.6.2 Market Estimates & Forecast by Application, 2018-2023
8.2.6.3 Market Estimates & Forecast by Product Type, 2018-2023
8.2.6.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.3 Europe
8.3.1 Market Estimates & Forecast, 2018-2023
8.3.2 Market Estimates & Forecast by Application, 2018-2023
8.3.3 Market Estimates & Forecast by Product Type, 2018-2023
8.3.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.3.5 U.K.
8.3.5.1 Market Estimates & Forecast, 2018-2023
8.3.5.2 Market Estimates & Forecast by Application, 2018-2023
8.3.5.3 Market Estimates & Forecast by Product Type, 2018-2023
8.3.5.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.3.6 Germany
8.3.6.1 Market Estimates & Forecast, 2018-2023
8.3.6.2 Market Estimates & Forecast by Application, 2018-2023
8.3.6.3 Market Estimates & Forecast by Product Type, 2018-2023
8.3.6.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.3.7 France
8.3.7.1 Market Estimates & Forecast, 2018-2023
8.3.7.2 Market Estimates & Forecast by Application, 2018-2023
8.3.7.3 Market Estimates & Forecast by Product Type, 2018-2023
8.3.7.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.3.8 Italy
8.3.8.1 Market Estimates & Forecast, 2018-2023
8.3.8.2 Market Estimates & Forecast by Application, 2018-2023
8.3.8.3 Market Estimates & Forecast by Product Type, 2018-2023
8.3.8.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.3.8.5 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.3.8.6 Rest of Europe
8.3.8.1 Market Estimates & Forecast, 2018-2023
8.3.8.2 Market Estimates & Forecast by Application, 2018-2023
8.3.8.3 Market Estimates & Forecast by Product Type, 2018-2023
8.3.8.5 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.4 Asia Pacific
8.4.1 Market Estimates & Forecast, 2018-2023
8.4.2 Market Estimates & Forecast by Application, 2018-2023
8.4.3 Market Estimates & Forecast by Product Type, 2018-2023
8.4.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.4.5 China
8.4.5.1 Market Estimates & Forecast, 2018-2023
8.4.5.2 Market Estimates & Forecast by Application, 2018-2023
8.4.5.3 Market Estimates & Forecast by Product Type, 2018-2023
8.4.5.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.4.6 Japan
8.4.6.1 Market Estimates & Forecast, 2018-2023
8.4.6.2 Market Estimates & Forecast by Application, 2018-2023
8.4.6.3 Market Estimates & Forecast by Product Type, 2018-2023
8.4.6.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.4.7 India
8.4.7.1 Market Estimates & Forecast, 2018-2023
8.4.7.2 Market Estimates & Forecast by Application, 2018-2023
8.4.7.3 Market Estimates & Forecast by Product Type, 2018-2023
8.4.7.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.4.8 Rest of Asia Pacific
8.4.8.1 Market Estimates & Forecast, 2018-2023
8.4.8.2 Market Estimates & Forecast by Application, 2018-2023
8.4.8.3 Market Estimates & Forecast by Product Type, 2018-2023
8.4.8.4 Market Estimates & Forecast by Vehicle Type, 2018-2023
8.5 Rest of the World
8.5.1 Market Estimates & Forecast, 2018-2023
8.5.2 Market Estimates & Forecast by Application, 2018-2023
8.5.3 Market Estimates & Forecast by Product Type, 2018-2023
8.5.4 Market Estimates & Forecast by Vehicle Type, 2018-2023

9 Competitive Landscape

10 Company Profile
10.1 Robert Bosch (Germany)
10.1.1 Company Overview
10.1.2 Products/Product Offering
10.1.3 Financial Overview
10.1.4 Key Developments
10.1.5 Strategy
10.1.6 SWOT Analysis
10.2 Aptiv PLC (U.K.),
10.2.1 Company Overview
10.2.2 Products/Product Offering
10.2.3 Financial Overview
10.2.4 Key Developments
10.2.5 Strategy
10.2.6 SWOT Analysis
10.3 Continental (Germany)
10.10 ZF TRW Automotive (U.S.)
10.10.1 Company Overview
10.10.2 Products/Product Offering
10.10.3 Financial Overview
10.10.4 Key Developments
10.10.5 Strategy
10.10.6 SWOT Analysis
10.11 RFMicron (U.S.)
10.11.1 Company Overview
10.11.2 Products/Product Offering
10.11.3 Financial Overview
10.11.4 Key Developments
10.11.5 Strategy
10.11.6 SWOT Analysis

List of Tables
Table 1 Global Automotive Temperature sensor Market: By Region, 2017-2023
Table 2 North America Automotive Temperature sensor Market: By Country, 2017-2023
Table 3 Europe Automotive Temperature sensor Market: By Country, 2017-2023
Table 4 Asia Pacific Automotive Temperature sensor Market: By Country, 2017-2023
Table 5 RoW Automotive Temperature sensor Market: By Country, 2017-2023
Table 6 Global Automotive Temperature sensor Market, By Application, By Regions, 2017-2023
Table 7 North America Automotive Temperature sensor Market, By Application, By Country, 2017-2023
Table 8 Europe Automotive Temperature sensor Market, By Application, By Country, 2017-2023
Table 9 Asia Pacific Automotive Temperature sensor Market by Application, By Country, 2017-2023
Table 10 RoW Automotive Temperature sensor Market by Application, By Country, 2017-2023
Table 11 Global Automotive Temperature sensor by Component Market: By Regions, 2017-2023
Table 12 North America Automotive Temperature sensor Market by Component: By Country, 2017-2023
Table 13 Europe Automotive Temperature sensor Market by Component: By Country, 2017-2023
Table 14 Asia Pacific Automotive Temperature sensor Market by Component: By Country, 2017-2023
Table 15 RoW Automotive Temperature sensor Market by Component: By Country, 2017-2023
Table 16 Global Automotive Temperature sensor by Vehicle Type Market: By Regions, 2017-2023
Table 17 North America Automotive Temperature sensor Market by Vehicle Type: By Country, 2017-2023
Table 18 Europe Automotive Temperature sensor Market by Vehicle Type: By Country, 2017-2023
Table 19 Asia Pacific Automotive Temperature sensor Market by Vehicle Type: By Country, 2017-2023
Table 20 RoW Automotive Temperature sensor Market by Vehicle Type: By Country, 2017-2023
Table 21 Global Automotive Temperature sensor Market: By Region, 2017-2023
Table 22 Global Automotive Temperature sensor Market: By Application, 2017-2023
Table 23 Global Automotive Temperature sensor Market: By Product Type, 2017-2023
Table 24 Global Automotive Temperature sensor Market: By Vehicle Type, 2017-2023
Table 25 North America Automotive Temperature sensor Market, By Country
Table 26 North America Automotive Temperature sensor Market, By Technology
Table 27 North America Automotive Temperature sensor Market, By Component
Table 28 North America Automotive Temperature sensor Market, By Vehicle Type
Table 29 Europe: Automotive Temperature sensor Market, By Country
Table 30 Europe: Automotive Temperature sensor Market, By Technology
Table 31 Europe: Automotive Temperature sensor Market, By Component
Table 32 Europe: Automotive Temperature sensor Market, By Vehicle Type
Table 33 Asia Pacific: Automotive Temperature sensor Market, By Country
Table 34 Asia Pacific: Automotive Temperature sensor Market, By Technology
Table 35 Asia Pacific: Automotive Temperature sensor Market, By Component
Table 36 Asia Pacific: Automotive Temperature sensor Market, By Vehicle Type
Table 37 RoW: Automotive Temperature sensor Market, By Region
Table 38 RoW Automotive Temperature sensor Market, By Technology
Table 39 RoW Automotive Temperature sensor Market, By Component
Table 40 RoW Automotive Temperature sensor Market, By Vehicle Type

List of Figures
FIGURE 1 Research Process of MRFR
FIGURE 2 Top down & Bottom up Approach
FIGURE 3 Market Dynamics
FIGURE 4 impact analysis: market drivers
FIGURE 5 impact analysis: market restraints
FIGURE 6 porter’s five forces analysis
FIGURE 7 Value chain analysis
FIGURE 8 Global Automotive Temperature sensor Market SHARE, By Application, 2016 (%)
FIGURE 9 Global Automotive Temperature sensor Market, By Application, 2015-2023 (USD MILLION)
FIGURE 10 Global Automotive Temperature sensor Market SHARE, By Product Type, 2016 (%)
FIGURE 11 Global Automotive Temperature sensor Market, By Product Type, 2015-2023 (USD MILLION)
FIGURE 12 Global Automotive Temperature sensor Market SHARE, By Vehicle Type, 2015-2023 (USD MILLION)
FIGURE 13 Global Automotive Temperature sensor Market SHARE (%), BY REGION, 2016
FIGURE 14 Global Automotive Temperature sensor Market, BY REGION, 2015-2023 (USD MILLION)
FIGURE 15 North America Automotive Temperature sensor Market SHARE (%), 2016
FIGURE 16 North America Automotive Temperature sensor Market BY Country, 2015-2023 (USD MILLION)
FIGURE 17 Europe Automotive Temperature sensor Market SHARE (%), 2016
FIGURE 18 Europe Automotive Temperature sensor Market BY Country, 2015-2023 (USD MILLION)
FIGURE 19 Asia Pacific Automotive Temperature sensor Market SHARE (%), 2016
FIGURE 20 Asia Pacific Automotive Temperature sensor Market BY Country, 2015-2023 (USD MILLION)
FIGURE 21 Rest of the World Automotive Temperature sensor Market SHARE (%), 2016
FIGURE 22 Rest of the World Automotive Temperature sensor Market BY Country, 2015-2023 (USD MILLION)