

Gas Sensor Market by Gas Type (Oxygen, Carbon Monoxide, Carbon Dioxide, Nitrogen Oxide, Volatile Organic Compounds, Hydrocarbons), Technology, Output Type, Product Type, Application and Region - Global Forecast to 2027

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Abstracts

The gas sensor market is projected to grow from USD 1.4Billion in 2022 to USD 2.1Billion by 2027; it is expected to grow at a CAGR of 8.9% during the forecast period. Increasing demand for miniaturized wireless gas sensors will propel the growth opportunities for gas sensor market. Increasing integration of gas sensors in HVAC systems and air quality monitors will boost the adoption of gas sensors. Intense pricing pressure resulting in decline in average selling prices and complexities involved while developing industry specific gas sensors will restrain the market growth.

“Market for Solid-State/Metal-Oxide-Semiconductor Technology to grow at higher CAGR during forecast period”

Metal oxide semiconductors provide sensors with several advantages, such as low cost and high sensitivity. MOS technology is largely used in the healthcare sector. MOS sensors are also used to detect gases such as hydrocarbons and carbon monoxide in the environment. Further, increasing product developments by top market players are driving the market growth. For instance, SGX SENSORTECH (Switzerland) patented MOS technology utilizing state-of-the-art MEMS (micro-electromechanical systems) technology, combining a specialized nano-particle sensing layer with a patented polysilicon heater.

“Market for Volatile Organic Compound Technology to grow at highest CAGR during the forecast period”

The VOC sensor directly measures ambient concentrations of a broad range of “reducing gases” associated with bad air quality like alcohols, aldehydes, ketones, organic acids, amines, organic chloramines, and aliphatic and aromatic hydrocarbons. VOCs are commonly present in manufacturing dyes, plastics, detergents, solvents, paints, synthetic rubber, and pharmaceuticals. VOC sensors are used to monitor indoor air quality and urban air quality. Figaro Engineering (Japan), Alphasense Ltd. (UK), Sensirion AG (Switzerland), ams AG (Austria), and Senseair AB (Sweden) are major players that offer VOC sensors.

“Asia Pacific to create highest growth opportunities for gas sensor market among other region during the forecast period”

The countries of Asia Pacific are witnessing increased demand for gas sensors, and this demand is expected to grow at a significant rate during the forecast period as well. Moreover, the rise in the number of smart city projects in countries such as India and China is also leading to increased demand for gas sensors from these countries. Gas sensors are used in several industries such as automotive, oil & gas, chemical, consumer electronics, etc. the region. Among all these, the adoption of gas sensors is projected to be the highest in the consumer electronics industry. Increasing urbanization and income levels and ongoing construction activities for the development of residential and commercial infrastructure in Asia Pacific are expected to lead to demand for HVAC systems equipped with gas sensors in the region, thereby fuelling the growth of the gas sensor market growth in the region.

In the process of determining and verifying the market size for several segments and subsegments gathered through secondary research, extensive primary interviews have been conducted with key industry experts in the gas sensor marketplace. The break-up of primary participants for the report has been shown below:

By Company Type: Tier 1– 50%, Tier 2– 30%, and Tier 20%

By Designation: C-level Executives– 35%, Directors– 20%, and Others –40%

By Region: North America–30%,APAC– 40%, Europe – 25%, and RoW– 5%

The report profiles key players in the gas sensor market with their respective market ranking analysis. Prominent players profiled in this report are Honeywell Analytics (UK),

Amphenol (US), Figaro Engineering (Japan), Alphasense Ltd. (UK), Sensirion AG (Switzerland), Dynament Ltd. (UK), ams AG (Austria), MEMBRAPOR AG (Switzerland), and Senseair AB (Sweden), among others.

Research Coverage:

This research report categorizes the gas sensor market on the basis of product, technology, connectivity, gas type, and output type, application, and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to the gas sensor market and forecasts the same till 2027. Apart from these, the report also consists of leadership mapping and analysis of all the companies included in the gas sensor ecosystem.

Key Benefits of Buying the Report

The report will help market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall gas sensor market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

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*Details on Business Overview, Products Offered, Recent Developments, and MnM View (Key strengths/Right to Win, Strategic Choices Made, and Weaknesses and Competitive Threats) might not be captured in case of unlisted companies.

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