

Environmental Sensor Market by Type (Temperature, Humidity, Air Quality, Ultraviolet, Water Quality, Soil Moisture, Integrated), Deployment (Indoor, Outdoor, Portable), Application (Smart Home, Smart Office, Smart City) - Global Forecast to 2028

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Abstracts

The environmental sensor market is projected to grow from USD 1.8 billion in 2023 and is projected to reach USD 3.0 billion by 2028; it is expected to grow at a CAGR of 11.0% from 2023 to 2028.

Strong focus on implementation of smart city projects, and growing demand for environmental sensors from manufacturers of consumer electronics are the factors expected to fuel the growth of the environmental sensor market.

“Gas/Air Quality segment of the environmental sensor market to witness high growth during the forecast period.”

The environmental sensor market's gas/air quality segment is projected to be the fastest-growing segment over the forecast period. The high growth rate is attributed to increased awareness of health hazards associated with poor air quality, stringent government regulations, a growing emphasis on sustainable, healthy living environments, and the demand for real-time data analytics. These air quality sensors are designed to measure and monitor the levels of various atmospheric pollutants and gases. The growing awareness among individuals about the link between indoor air quality and overall well-being is fostering a rising demand for residential gas/air quality sensors. Furthermore, the proliferation of the Internet of Things (IoT) technology and advancements in sensor technologies are enhancing the efficiency, accuracy, and affordability of gas/air quality sensors, making them more accessible to various

industries and applications. These factors, combined with the pressing need for sustainable environmental practices, are expected to drive the gas/air quality sensor market growth in the coming years.

“Consumer electronics segment to witness significant growth for environmental sensor market during the forecast period.”

The consumer electronics sector is poised for remarkable growth within the environmental sensor market due to compelling drivers shaping the industry's landscape. In recent years, there has been a surge in consumer awareness regarding health and environmental issues, driving the demand for products that enhance the quality of life. Environmental sensors integrated into consumer electronics, such as smartphones, wearables, and home appliances, offer functionalities like air quality monitoring, UV radiation detection, and noise level analysis, catering to this growing demand for health-conscious products. Additionally, the rapid evolution of technology has led to miniaturization and cost reduction in sensor manufacturing. This has made it feasible for consumer electronics manufacturers to incorporate advanced environmental sensors into their products without significantly increasing production costs. As a result, consumers can now access devices that provide real-time environmental data, empowering them to make informed decisions about their surroundings and wellbeing.

“Asia Pacific to hold a major market share of the environmental sensor market during the forecast period” Asia Pacific is expected to hold a major market share for environmental sensor market during the forecast period. Asia Pacific has the largest number of end users of smartphones. Technology advancements lead to the integration of environmental sensors in smartphones, thereby driving market growth in this region. Growing awareness among people regarding the impact of air pollution on health creates demand for these sensors from devices such as low-cost and smart air quality monitors, smart bands, air purifiers, and air cleaners. The proliferation of consumer electronics devices will fuel the market growth for Asia Pacific over the forecast period.

Extensive primary interviews were conducted with key industry experts in the environmental sensor market space to determine and verify the market size for various segments and subsegments gathered through secondary research. The break-up of primary participants for the report has been shown below:

The break-up of the profile of primary participants in the environmental sensor market:

By Company Type: Tier 1 – 40%, Tier 2 – 30%, and Tier 3 – 30%

By Designation: C Level – 20%, Director Level – 30%, Others-50%

By Region: North America – 30%, Europe – 20%, Asia Pacific – 40%, ROW-10%

The report profiles key players in the environmental sensor market with their respective market ranking analysis. Prominent players profiled in this report are Honeywell International Inc. (US), Sensirion AG (Switzerland), Siemens (Germany), ams-OSRAM AG (Austria), Bosch Sensortec GmbH (Germany), OMRON Corporation (Japan), Raritan Inc. (US), Texas Instruments Incorporated (US), Schneider Electric (France), and Amphenol Corporation (US).

Apart from this, Aeroqual (New Zealand), Alphasense (England), Apogee Instruments (US), Avtech (US), METER Group (US), Analog Devices, Inc. (US), STMicroelectronics (Switzerland), Figaro Engineering (US), TE Connectivity (Switzerland), Renesas Electronics Corporation (Japan), NuWave Sensors (Ireland), eLichens (France), RioT Technology (Canada), Develco Products (Denmark), and Breeze Technologies (Germany) are among a few emerging companies in the environmental sensor market.

Research Coverage: This research report categorizes the environmental sensor market on the basis of type, deployment, application, vertical, and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to the environmental sensor market and forecasts the same till 2028. Apart from these, the report also consists of leadership mapping and analysis of all the companies included in the environmental sensor ecosystem.

Key Benefits of Buying the Report The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall environmental sensor market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and to 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.

The report provides insights on the following pointers:

Analysis of key drivers (Implementation of stringent regulations to reduce air

pollution, Health and safety concerns, Increased deployment of air quality monitoring stations, Strong focus on implementation of smart city projects, Growing demand for environmental sensors from manufacturers of consumer electronics), restraints (High data and maintenance costs, Adverse impact of extreme temperatures on sensor life), opportunities (Rising deployment of IoT and cloud-based services in environmental sensors, Development of nanotechnology-based environmental monitoring products, Integration of GIS with IoT for seamless data collection, Need to monitor water pollution in industrial and residential sectors) and challenges (Different specifications across industries, Limited access in remote and harsh environments) influencing the growth of the environmental sensor market.

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the environmental sensor market.

Market Development: Comprehensive information about lucrative markets – the report analysis the environmental sensor market across varied regions

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the environmental sensor market

Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Honeywell International Inc. (US), Sensirion AG (Switzerland), Siemens (Germany), ams-OSRAM AG (Austria), Bosch Sensortec GmbH (Germany), among others in the environmental sensor market.

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