

Virtual Sensors Market by Component (Solutions and Services), Deployment Mode (Cloud and On-Premises), End User (Process Industry - Manufacturing and Utilities, Automotive and Transportation, and Oil and Gas), and Region - Global Forecast to 2023

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Abstracts

Potential reduction in the time and cost required for product development through the implementation of a virtual sensor to drive the virtual sensors market

The global virtual sensors market size is expected to grow from USD 235 million in 2018 to USD 910 million by 2023, at a Compound Annual Growth Rate (CAGR) of 31.1% during the forecast period. The virtual sensors market's major growth factors are the use of predictive maintenance, potential reduction in the time and cost compared to physical sensors, and rising adoption of the IoT cloud platforms. However, lack of awareness related to the cost benefit of the adoption of virtual sensors is hindering the adoption of virtual sensors.

Services segment to grow at the highest CAGR during the forecast period

Services are an integral part of the virtual sensors market. The services associated with virtual sensor solutions play a vital role in the efficient and effective functioning of the virtual sensor solutions. The services include deployment and integration, training and consulting, and support and maintenance. The services provide assistance during the different phases of planning, deploying, and maintaining, the virtual sensor solutions. They are vital for successful deployment of virtual sensor solutions across industries. With the rise in adoption of virtual sensor solution, the demand for services is also



expected to increase.

Process industry—manufacturing and utilities segment to hold the largest market size during the forecast period

In process industry—manufacturing and utilities industries, industrial digitalization is one of the important criteria for optimizing the manufacturing processes of robots, industrial machines, and processing setups. However, virtual sensors along with AI and IoT have been adopted by process industry-manufacturers /Original Equipment Manufacturers (OEMs) as the use of these technologies collectively enables machinery designing without using design prototypes, process optimization, remote monitoring, and timely data delivery in the manufacturing plants, which is an important factor that drives the virtual sensors market for discrete industries. Virtual sensor solutions are used to implement an enterprise asset management and life cycle service strategy, which has been majorly beneficial for both the OEMs and the owner-operators.

Asia Pacific to record the highest growth rate during the forecast period

APAC is expected to grow at the highest CAGR during the forecast period, due to the increasing demand for virtual sensor solutions and services. Major APAC economies, such as China, Australia, Japan, and India, provide huge opportunities for vendors of virtual sensor solutions and services in the region. Meanwhile, North America is projected to hold the largest market size during the forecast period.

In-depth interviews were conducted with Chief Executive Officers (CEOs), marketing directors, other innovation and technology directors, and executives from various key organizations operating in the virtual sensors marketplace.

By company type: Tier 1: 38%, Tier 2: 42%, and Tier 3: 20%

By designation: C-level: 40%, D-level: 35%, and Others: 25%

By region: North America: 35%, Europe: 27%, APAC: 23%, MEA: 10%, and

Latin America: 5%

Major vendors offering virtual sensor solutions and services across the globe include General Electric (US), Cisco (US), Honeywell (US), Siemens (Germany), Schneider Electric (France), Elliptic Labs (Norway), algorithmica technologies (Germany),



EXPUTEC (Austria), TACTILE MOBILITY (Israel), IntelliDynamics (US), ANDATA (Austria), Aspen Technology (US), OSIsoft (US), Modelway (Italy), and LMI Technologies (Canada).

The study includes an in-depth competitive analysis of these key players in the virtual sensors market with their company profiles, recent developments, and key market strategies.

Research coverage

The market study covers the virtual sensors market size across segments. It aims at estimating the market size and the growth potential of this market across segments, such as components, deployment types, end users, and regions. The study also includes an in-depth competitive analysis of the key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.

Key benefits of buying the report

The report would help the market leaders/new entrants in this market with the information on the closest approximations of the revenue numbers for the overall virtual sensors market and subsegments. This report would 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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