

IWSN Market by Sensor (Temperature, Pressure, Level, Flow, Humidity, & Others), Technology (Bluetooth, Wi-Fi, Wirelesshart, & Isa.100.11a), Application (Oil & Gas, Energy & Power, Automotive, & Food & Beverage) & Geography - Global Trend & Forecast to 2013 - 2020

https://marketpublishers.com/r/ID0FC849666EN.html

Date: December 2014

Pages: 152

Price: US\$ 5,650.00 (Single User License)

ID: ID0FC849666EN

# **Abstracts**

The Industrial Wireless Sensor Network (IWSN) is the network of distributed autonomous sensors, which are used to monitor physical or environmental conditions. IWSNs are deployed in harsh environment areas, where wired networks cannot be deployed easily. This report classifies the IWSN market into four different segments, such as market by sensors, technologies, applications and geographies. The report entails the analyses and forecasts related to the IWSN market.

The report scope includes the IWSN market by sensor, technology, application, and geography. Based on the sensors used, the IWSN market has been classified into temperature, pressure, flow, level, chemical and gas, motion and position, humidity, and image sensors. The application segment includes chemical, mining, food and beverage, medical and healthcare, power and energy, oil and gas, and automotive, among others.

The global IWSN market size is estimated to grow from \$401.23 million in 2013 to \$944.92 million by 2020 at a CAGR of 12.96% from 2014 to 2020. The wireless temperature sensors are expected to grow at a CAGR of 13.42%. This growth is heralded by the oil and gas, automotive, and food and beverages industries.

The report analyzes the entire market on the basis of all the major geographic segments, such as North America, Europe, Africa, the Middle-East, and Asia. North



America is currently the largest market for IWSN systems, but the Asian region is expected to exhibit a high growth in the next seven years.

The report also draws the competitive landscape of the IWSN industry by analyzing the major players and the strategies adopted by them for growth in the market. Apart from the market segmentation data, the report also includes qualitative analysis of various market dynamics such as the drivers, restraints, opportunities, burning issues, and winning imperatives. It also analyzes the overall market through various models, such as Porter's five forces model.

The report, along with the market share analysis, profiles the major companies active in this field such as ABB Ltd. (Switzerland), Emerson Electric Co. (U.S.), Honeywell International, Inc. (U.S.), Yokogawa Electric Corporation (Japan), and General Electric (U.S.), among others.



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# **About**

Industrial wireless sensor networks (IWSNs) are a network of different sensors placed at the remote plant area, also called as the main location, which uses wireless technology to send signals or measurements to the control room. These networks can be monitored, controlled, and troubleshoot remotely. IWSN is widely used in chemical, mining, food and beverage, medical and healthcare, and power and utility industries.

WSNs are widely used in home and building automation sectors. In 2014, more than XX% of the Total WSN market has been accounted by these two sectors. The industrial sector accounted for XX% of the Total market. This is mainly due to wired technologies that are still used widely in the industrial sector for the purpose of measuring and monitoring.

Since the past few years, industries have witnessed a significant shift from the traditional technologies, that is, wired technologies, to the wireless technologies. Advances in safety, affordability, security, and maintenance within the constraints of the frequency allocation band have insisted the organizations to take advantages of IWSN for challenging environments. The current trend of developing new standards in association with the industry alliances has helped the industry to move toward the lower costs and higher functions of IWSN systems. For example, the emergence of technologies such as WirelessHART and ISA 100.11a has provided an exceptional boost to the IWSN technology market. Furthermore, the successful use of IWSN in systems such as Supervisory Control and Data Acquisition (SCADA) has proven that these networks can effectively address the needs of industrial applications.

The global industrial sensor network market predicts a productive growth potential for the next six years. The growth of this market is propelled by the advent use of wireless sensor networks in various industrial applications, technological advancements in the wireless technology, and enhanced reliability of the wireless sensor networks.

IWSN is, these days, useful for industrial applications such as oil and gas (including refineries, petrochemical plants, pipelines, drilling, exploration and production, and transportation), water and wastewater, chemical, metal and mining, power, automotive, pharmaceuticals, and food and beverages.

The major players in the IWSN market are Emerson Electric Co. (U.S.), General Electric Company (U.S.), Honeywell International Inc. (U.S.), ABB Ltd. (Switzerland),



Endress+Hauser (Switzerland), Siemens AG (Germany), Yokogawa Electric Corp. (Japan), and others.



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