

## **India Industrial Sensors and Transmitters - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029**

Market Report | 2024-02-17 | 100 pages | Mordor Intelligence

### **AVAILABLE LICENSES:**

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

### **Report description:**

The India Industrial Sensors and Transmitters Market size is estimated at USD 1.25 billion in 2024, and is expected to reach USD 1.95 billion by 2029, growing at a CAGR of 9.37% during the forecast period (2024-2029).

#### Key Highlights

- Factory automation and Industry 4.0 rely heavily on industrial sensors. Sensors such as motion, environmental, and vibration sensors are used to monitor the health of equipment, ranging from linear or angular positioning to tilt sensing, leveling, shock, or fall detection. India's industries are well-positioned to expand their operations economically and demographically while supporting domestic interests and export opportunities that are expected to increase soon.
- As part of the 'Make in India' initiative, the Indian government intends to prioritize automobile manufacturing. According to the Auto Mission Plan (AMP) 2016-26, the passenger car market would triple to 9.4 million units by 2026, which is predicted to increase sensor usage in the region. Companies are also expanding their activities to strengthen their positions in the markets in which they operate. For example, Gurgaon-based auto component supplier Minda Industries partnered with two Chinese subsidiaries of US-based Sensata to purchase the wheel speed sensors required to enhance their portfolio.
- Furthermore, the demand for automation is expanding in government-designated essential industries such as food and beverage, manufacturing, and pharmaceutical, due to a lack of labor and the need for remote monitoring and working, which has driven the demand for various sensors.
- Cost and operational concerns are some of India's barriers to market growth. High installation costs may cause disinclination in the adoption of sensor technology. The sensor's specifications vary depending on the application, and the price of the sensors is determined by the quality of raw materials used. For example, as an important part of producing a superior temperature sensor, the producer's high-quality raw materials choice is vital.
- COVID-19 had a negative impact on many industrial sectors. The automotive and process industries were on hold or reduced

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

production during the first quarter of 2020. As a result, the demand for all types of sensors in these industries was significantly impacted. Expansion of industrial and IoT devices for pressure sensors was observed as more and more process industries started investing in automation monitoring devices, owing to safety and stringent government regulations in India.

## India Industrial Sensors & Transmitters Market Trends

### Flow Sensors are Expected to be Higher in Demand

- The deployment of Internet of Things technology in the industrial field has resulted in the Industrial IoT becoming the development direction and trend. Gas flow sensors are widely utilized in industrial automation, natural gas, metallurgy, mining, petroleum, aviation, industrial packaging, and industrial cleaning, among other fields. In addition, the requirement for flow measurement in oil and gas in response to rigorous rules related to controlling harmful gas emissions from power plants is driving the region's adoption of flow sensors.
- Flow Sensors are components that can measure the flow of a fluid, such as a gas or liquid. These sensors utilize both mechanical and electrical subsystems to measure changes in the fluid's physical attributes and calculate its flow. In India, the adoption of flow sensors is widely seen in various end-user industries, including pharmaceutical, automotive, oil and gas, chemical, water and wastewater, manufacturing, power generation, chemical, and others.
- These sensors are distinguished by the type of technologies that are used to measure flow. The technologies include Coriolis, Differential Flow, Ultrasonic, Vortex, and others. There has been significant development in technologies, such as ultrasonic, to operate in harsh environments with precision.
- The selection of an appropriate flow sensor for monitoring fuel gas to flare and acid gas, as well as monitoring liquefied natural gas (LNG) during processing, transportation, and storage, is crucial. Furthermore, because of the increased need for efficiency and accuracy in equipment operation, the adoption of automation across the oil and gas value chain had a major impact on the adoption of flow sensors.
- In the oil & gas sector, flow measurement is crucial. It is required in upstream operations that include well testing, enhanced oil recovery, fractionation, completion, and separation, as well as the recovery and preparation of crude oil and natural gas.

### Chemicals and Fertilizers Sector is Expected to Witness Higher Growth

- The pressure sensor is one of the most widely used measurement devices in the chemical industry's automatic control. In large-scale chemical projects, almost all pressure sensor applications, including differential pressure, absolute pressure, gauge pressure, high pressure, differential pressure, high temperature, low temperature, and remote transmission flange pressure sensors of various materials and special processing, are used. The chemical industry's demand for pressure sensors can be summarised as follows: measurement precision, fast response, temperature, and static pressure characteristics, and long-term stability.
- Liquid level sensors are employed in the Petrochemicals and Chemical factories to detect highly corrosive and acidic chemicals, ensuring that all operations run smoothly. In the petrochemical industry, ultrasonic liquid level sensors are employed because they are non-contact devices that provide safety while detecting chemical quality.
- Temperatures in cracking and Sulphur recovery furnaces can range from cryogenic (far below zero) to over 800C. Temperatures this high necessitate a diverse set of materials and sensor technologies. In applications below 600C, RTD sensors provide a more precise reading and can be used repeatedly.
- Sensor assemblies that are explosion-proof or intrinsically safe are necessary for the chemical industries, such as paints and flammable chemicals, because they deal with hydrocarbons and alcohols. Reliable and repeatable level, flow, pressure, and

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

temperature measurements are essential for safe, precise, and continuous process control. Thermocouples, RTD sensors with thermo wells, infrared temperature sensors, and infrared thermal imaging are often used to monitor these processes.

- The pressure transmitter is one of the chemical industry's most commonly used automatic control devices. It covers almost all pressure transmitter applications in large chemical projects, such as differential pressure, absolute pressure, gauge pressure, pressure, differential pressure, high temperature, low temperature, and a variety of materials and special processing of remote flange Pressure Transmitters.

## India Industrial Sensors & Transmitters Industry Overview

India Industrial Sensors and Transmitters Market is concentrated with only a few players in the market. The players are seen to be increasingly seeking market expansion through various strategic mergers and acquisitions, innovation, and increasing investments in research and development to stay ahead of the competition.

- July 2021 - The Digital University Kerala (DUK), in association with the Centre for Materials for Electronics Technology (C-MET), agreed to set up the country's first Centre of Excellence in Intelligent Internet of Things (IIoT) sensors near Kochi. The Union Ministry of Electronics and Information Technology (MeitY) and the state IT department planned to set up the Centre of Excellence (CoE) together.

- July 2021 - WIKA Instruments India Pvt. Ltd. has introduced a pressure sensor module for industrial applications. The model MTF-1 pressure sensor module is a simple and adaptable choice for incorporating pressure measurement into many applications. The pressure value is digitally processed in the module and output as a standardized digital or analog signal. Thus, the MTF-1 module provides exact data for applications with pressures of up to 1,000 bar and is designed for energy-saving operation. The module is intended to operate in an energy-efficient manner because of digital I2C signal transmits data extremely efficiently because of its low basic energy consumption and rapid switch-on periods.

### Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

### Table of Contents:

#### 1 INTRODUCTION

- 1.1 Study Assumptions and Market Definition
- 1.2 Scope of the Study

#### 2 RESEARCH METHODOLOGY

#### 3 EXECUTIVE SUMMARY

#### 4 MARKET INSIGHTS

- 4.1 Market Overview
- 4.2 Value Chain Analysis
- 4.3 Industry Attractiveness- Porter's Five Forces Analysis
  - 4.3.1 Threat of New Entrants
  - 4.3.2 Bargaining Power of Buyers

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 4.3.3 Bargaining Power of Suppliers
- 4.3.4 Threat of Substitutes
- 4.3.5 Intensity of Competitive Rivalry
- 4.4 Technology Snapshot
- 4.5 Assessment of the Impact of COVID-19 on the Market

## 5 MARKET DYNAMICS

### 5.1 Market Drivers

- 5.1.1 Increasing Competition Among Various End-users To Stay Competitive By Introducing World- Class Manufacturing Facilities
- 5.1.2 Increasing Consumer Demand for Superior Quality Products and Concerns Over Human Intervention

### 5.2 Market Restraints

- 5.2.1 Cost and Operational Concerns

## 6 MARKET SEGMENTATION

### 6.1 Type of Sensor

- 6.1.1 Flow
- 6.1.2 Temperature
- 6.1.3 Pressure
- 6.1.4 Level
- 6.1.5 Transmitters and Other Sensors

### 6.2 End-User

- 6.2.1 Power
- 6.2.2 Petrochemicals, Chemicals and Fertilizers
- 6.2.3 Food and Beverage
- 6.2.4 Water and Wastewater
- 6.2.5 Life Sciences
- 6.2.6 Oil and Gas
- 6.2.7 Other End-Users

## 7 COMPETITIVE LANDSCAPE

### 7.1 Company Profiles

- 7.1.1 EXA Thermometrics India Pvt. Ltd
- 7.1.2 Vishay Intertechnology, Inc.
- 7.1.3 Turck India Automation Private Limited
- 7.1.4 Arcotherm Pvt Ltd
- 7.1.5 SRI Electronics
- 7.1.6 WIKA Instruments India Pvt. Ltd.
- 7.1.7 SENSOREX, Inc

## 8 INVESTMENT ANALYSIS

## 9 FUTURE OF THE MARKET

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

**India Industrial Sensors and Transmitters - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029**

Market Report | 2024-02-17 | 100 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

| Select license | License                  | Price     |
|----------------|--------------------------|-----------|
|                | Single User License      | \$4750.00 |
|                | Team License (1-7 Users) | \$5250.00 |
|                | Site License             | \$6500.00 |
|                | Corporate License        | \$8750.00 |
|                |                          | VAT       |
|                |                          | Total     |

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

|               |                      |                               |   |
|---------------|----------------------|-------------------------------|---|
| Email*        | <input type="text"/> | Phone*                        | <input type="text"/>                    |
| First Name*   | <input type="text"/> | Last Name*                    | <input type="text"/>                    |
| Job title*    | <input type="text"/> |                               |   |
| Company Name* | <input type="text"/> | EU Vat / Tax ID / NIP number* | <input type="text"/>                    |
| Address*      | <input type="text"/> | City*                         | <input type="text"/>                    |
| Zip Code*     | <input type="text"/> | Country*                      | <input type="text"/>                    |
|               |                      | Date                          | <input type="text" value="2026-03-01"/> |
|               |                      | Signature                     |   |

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

