

Global Multi-Axis Force Torque Sensor Market: Key Trends, Market Share, Growth Drivers, And Forecast For 2025-2034

The Business Research Company's Multi-Axis Force Torque Sensor Global Market Report 2025 – Market Size, Trends, And Forecast 2025-2034

LONDON, GREATER LONDON, UNITED KINGDOM, May 13, 2025

/EINPresswire.com/ -- The multi-axis force torque sensor market size has

grown strongly in recent years. It will grow from \$1.00 billion in 2024 to \$1.08 billion in 2025 at a compound annual growth rate CAGR of 8.6%. The growth in the historic period can be attributed to increasing adoption in robotics, rising demand for automation, advancements in sensor technology, growing use in aerospace applications, and expansion of industrial automation.



The Business Research Company's Latest Report Explores Market Driver, Trends, Regional Insights - Market Sizing & Forecasts Through 2034"

The Business Research Company

What is the projected growth rate and market size of the global multi-axis force torque sensor market?

The multi-axis force torque sensor market size is expected to see strong growth in the next few years. It will grow to \$1.49 billion in 2029 at a compound annual growth rate CAGR of 8.3%. The growth in the forecast period can be attributed to rising demand for precision force measurement, increasing adoption in medical robotics, advancements in AI-driven sensors, growth in smart manufacturing, and expanding applications in

autonomous systems. Major trends in the forecast period include integration with AI and machine learning, development of wireless force-torque sensors, increasing use in collaborative robotics, miniaturization of sensor technology, and growing demand in biomechanics and prosthetics.

Get Your Free Sample Market Report:

https://www.thebusinessresearchcompany.com/sample_request?id=22062&type=smp

The Business
Research Company

The Business Research Company



What Is The Primary Growth Driver Of The Multi-Axis Force Torque Sensor Market?

The increasing automation in manufacturing processes is expected to propel the growth of the multi-axis force torque sensor market going forward. Automation in manufacturing refers to the use of technology and control systems to operate production processes with minimal human intervention, improving efficiency, quality, and productivity. The increase in automation in manufacturing is due to the need for higher efficiency and productivity, reduced labor costs, and improved product quality and precision. As industries strive to stay competitive, automation allows for faster production cycles, minimizing human error and improving overall efficiency. A multi-axis force torque sensor enhances automation by enabling robots to detect and respond to forces in multiple directions, improving manufacturing processes' precision, adaptability, and safety. For instance, in September 2023, according to the International Federation of Robotics, a Germany-based professional non-profit organization, there were 553,052 industrial robot installations in factories worldwide in 2023, reflecting a 5% year-on-year growth in 2022. Therefore, the increasing automation in manufacturing processes is driving the growth of the multi-axis force torque sensor market.

Order Your Report Now For A Swift Delivery:

<https://www.thebusinessresearchcompany.com/report/multi-axis-force-torque-sensor-global-market-report>

Who Are The Significant Players In The Multi-Axis Force Torque Sensor Market?

Major companies operating in the multi-axis force torque sensor market are Minebeamitsumi Inc., Interface Inc., Hottinger Baldwin Messtechnik GmbH, Universal Robots A/S, Pcb Piezotronics Inc., Kistler Instrumente AG, ATI Industrial Automation Inc., OnRobot A/S, Futek Advanced Sensor Technology Inc., Amtab SE, Gtm Testing And Metrology GmbH, Applied Measurements Ltd, A-Tech Instruments Ltd., Althen GmbH, Bcm Sensor Technologies Bv, Sens2b-Sensors, Metromatics Pty Ltd, Bota Systems AG, Adi Artech Transducers Pvt. Ltd., Nordbo Robotics A/S, Crane Electronics Ltd, Hypersen Technologies Co. Ltd

What Emerging Trends Are Impacting the Multi-Axis Force Torque Sensor Market?

Major companies operating in the multi-axis force torque sensor market are focusing on developing innovative solutions, such as high-sensitivity multi-axis force-torque sensors, to enhance accuracy and performance in various applications. A high-sensitivity multi-axis force-torque sensor is a precision device that accurately measures forces and torques along multiple axes with minimal noise, enabling precise control in robotics, aerospace, and industrial applications. For instance, in March 2024, Bota Systems AG, a Switzerland-based provider of multi-axis force-torque sensors, introduced the SenseONE T5, a high-sensitivity version of its SenseONE multi-axis force-torque sensor. This new sensor boasts a sensitivity of 0.05 N / 0.002 Nm, three to five times higher than its predecessor, making it ideal for applications requiring precise force control. Designed for collaborative robots with small payloads of up to 5 kg, the SenseONE T5 is compact, lightweight, and offers a high sampling rate of up to 2000 Hz. The SenseONE T5 is suitable for delicate tasks such as precision assembly and quality testing, marking a significant advancement in robotic sensing technology.

How Is The Global Multi-Axis Force Torque Sensor Market Segmented?

The multi-axis force torque sensor market covered in this report is segmented –

1 By Type: 2-Axis, 3-Axis, 6-Axis, Other Types

2 By Technology: Strain Gauge-Based Sensors, Piezoelectric Sensors, Capacitive Sensors, Optical Sensors, Other Technologies

3 By Application: Aerospace And Defense, Automotive, Consumer Electronics, Medical Devices, Robotics

4 By End-User: Original Equipment Manufacturers OEMs, Research Institutions, Industrial Users, Service Providers, Government And Defense Sectors

Subsegments:

1 By 2-Axis Force Torque Sensors: Standard 2-Axis Sensors, Rotary 2-Axis Sensors, Customizable 2-Axis Sensors

2 By 3-Axis Force Torque Sensors: Standard 3-Axis Sensors, Rotary 3-Axis Sensors, High-Precision 3-Axis Sensors, Miniature 3-Axis Sensors

3 By 6-Axis Force Torque Sensors: Standard 6-Axis Sensors, High-Capacity 6-Axis Sensors, High-Precision 6-Axis Sensors, Embedded 6-Axis Sensors

4 By Other Types: Custom Multi-Axis Sensors, Wireless Multi-Axis Sensors, Capacitive Multi-Axis Sensors, Piezoelectric Multi-Axis Sensors

What Is The Regional Analysis Of the Market?

North America dominated the Multi-Axis Force Torque Sensor Market in 2024. However, Asia-Pacific is expected to be the fastest-growing region in the forecast period. The regions covered in the multi-axis force torque sensor market report are Asia-Pacific, Western Europe, Eastern Europe, North America, South America, Middle East, Africa.

Browse For More Similar Reports-

Chemical Sensors Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/chemical-sensors-global-market-report>

Fingerprint Sensor Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/fingerprint-sensor-global-market-report>

Temperature Sensor Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/temperature-sensor-global-market-report>

About The Business Research Company:

The Business Research Company boasts a repository of over 15000+ reports spanning 27 industries and 60+ geographies. It prides itself on comprehensive, data-rich research and insights. Armed with 1.5 million datasets, in-depth secondary research, and unique insights from industry leaders, it provides valuable data that helps you to stay ahead in the game.

Get in touch:

The Business Research Company: <https://www.thebusinessresearchcompany.com/>

Americas +1 3156230293

Asia +44 2071930708

Europe +44 2071930708

Email us: info@tbrc.info

Stay connected:

LinkedIn: <https://in.linkedin.com/company/the-business-research-company>

YouTube: https://www.youtube.com/channel/UC24_fl0rV8cR5DxICpgmyFQ

Global Market Model: <https://www.thebusinessresearchcompany.com/global-market-model>

Oliver Guirdham

The Business Research Company

+44 20 7193 0708

info@tbrc.info

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/812136194>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.