

3D Sensor Market Forecast: Emerging Trends and Growth Drivers Through 2031

3D Sensor Market Set for Robust Expansion: Key Insights from the 2021-2031 Forecast

WILMINGTON, DE, UNITED STATES, March 19, 2025 /EINPresswire.com/ -- Increasing demand for 3D-enabled devices in consumer electronics and the rapid upsurge in the requirement for medical imaging solutions are propelling the growth of the [3D sensor market](#) during the forecast period.

Allied Market Research, titled, "3D Sensor Market," The 3d sensor market size was valued at \$17.6 billion in 2021, and is estimated to reach \$57 billion by 2031, growing at a CAGR of 13% from 2022 to 2031.



□□□□□□□□ □□□□□□□□ □□□□□□ □□□□□□ & □□□: <https://www.alliedmarketresearch.com/request-sample/789>

“

The two main factors driving the market for 3D sensors are the rise in consumer electronics demand and the application of 3D sensors in the automotive sector.”

Allied Market Research

As the use of 3D sensing technology has grown, manufacturers have been working to provide high-quality sensors that can make use of both new and old technologies. A key driver of the market expansion is the usage of 3D sensors in augmented reality, mapping, and biometric sensors. Also, the market is aided by rising demand for 3D sensors in imaging applications, virtual reality, gaming, security, and surveillance. To create a 3D

model, it is also utilized by artists, engineers, and architects, which may also contribute to the 3d sensor market expansion. Electronics utilize three-dimensional depth sensing to detect the dimensions of objects. This technology is becoming more prevalent across a range of sectors and uses. These factors account for global [3D sensor market growth](#).

The complexity of 3D sensors, high maintenance costs, and poor manufacturing could restrain market expansion. Superior chip size is needed to capture images from 3D sensors, which

naturally drives up the cost of the production process. The performance of the image may be impacted by decreasing the pixel pitch to cut costs.

The Mechanical 3D-Sensor has been around for a while and is further developed into the Digital 3D-Sensor. It is used to establish the workpiece edges on milling and Electronic Distance Measurement (EDM). On the reference edge, the spindle can be rapidly and securely placed. The zero location is discovered on the first try and the setting operation may be carefully tracked on the digital display. The spindle axis is positioned precisely on the approaching edge, making it possible to select the machine coordinate system without performing any calculations. Additionally, the digital display features big, easy-to-read numbers with measurements in 0.0002 increments. The digital display can be stored in the machine's tool magazine and is dust- and splash-proof (IP64). These factors account for 3D sensor market trends during the forecasted period.

□□□ □□□□□□□□□□ □□□□□□□ □□□□ □□□'□□ □□□□□□□□□□□□□□:

<https://www.alliedmarketresearch.com/request-for-customization/789>

The global 3D sensor market share is segmented based on type, technology, connectivity, end-use, and region. By type, it is classified into the image sensor, accelerometer sensor, position sensor, and others. By technology, it is classified into structured light, time of flight, stereoscopic vision, ultrasound, and others. By connectivity, it is classified into wireless and wired. By end use, it is classified into consumer electronics, healthcare, aerospace & defense, automotive, and others. By region, the 3d sensor market is analyzed across North America, Europe, Asia-Pacific, and LAMEA.

The key players profiled in the [3D sensor market analysis](#) report include pmdtechnologies ag, Infineon Technologies AG, SAMSUNG, LMI TECHNOLOGIES INC., COGNEX CORPORATION, Microchip Technology Inc., Occipital, Inc., Qualcomm Technologies, Inc., KEYENCE CORPORATION, and OmniVision Technologies, Inc. These market players have adopted various strategies to increase their market share and strengthen their foothold in the industry.

□□□ □□□□□□□□□□ □□ □□□ □□□□□□

- Based on type, the image sensor sub-segment emerged as the global leader in 2021 and is anticipated to be the fastest-growing sub-segment during the forecast period
- Based on technology, the structured light sub-segment emerged as the global leader in 2021, and the stereoscopic vision sub-segment is predicted to show the fastest growth in the upcoming years
- Based on connectivity, the wireless sub-segment emerged as the global leader in 2021 and is predicted to show the fastest growth in the upcoming years
- Based on end-use, the consumer electronic sub-segment emerged as the global leader in 2021 and is predicted to show the fastest growth in the upcoming years
- Based on region, the Asia-Pacific market registered the highest market share in 2021 and is

projected to maintain the position during the forecast period

□□□□□□ □□□□□□ □□□□□□: <https://www.alliedmarketresearch.com/purchase-enquiry/789>

□□□□□ □□:

Allied Market Research is a top provider of market intelligence that offers reports from leading technology publishers. Our in-depth market assessments in our research reports consider significant technological advancements in the sector. In addition to other areas of expertise, AMR focuses on analyzing high-tech and advanced production systems. We have a team of experts who compile thorough research reports and actively advise leading businesses to enhance their current procedures. Our experts have a wealth of knowledge on the topics they cover. Also, they use a variety of tools and techniques when gathering and analyzing data, including patented data sources.

David Correa

Allied Market Research

+ 1800-792-5285

[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

[LinkedIn](#)

[YouTube](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/795280547>

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.