

Time-of-Flight (TOF) Sensor Market Revenues to Reach USD 8.36 billion by 2028 - Market Size, Share, Forecasts, & Trends Analysis Report by Mordor Intelligence

According to a new market research report titled "[Time-of-Flight \(TOF\) Sensor Market Report \(2023-2028\)](#)," the market is estimated at USD 4.56 billion in 2023. It is expected to register a CAGR of 21.07% during the forecast period.

The time-of-flight principle (ToF) measures the distance between a sensor and an object using the time difference between signal emission and its return after reflecting off an object. 3D imaging and scanning are significant applications for ToF sensors, offering accuracy and ease of use. The growing demand for smartphones with 3D cameras is driving this market, especially in countries like China, India, and the United States with high smartphone network subscriptions. ToF sensors are also in high demand in the automotive industry, boosted by Industry 4.0. AR and VR applications are expected to create more opportunities for the ToF sensors market in the coming years.

Report Summary:

Report Attribute	Details
Market Size (2023)	USD 4.56 billion
Market Size (2028)	USD 8.36 billion
CAGR (2023-2028)	21.07%
Study Period	2018-2028
Fastest Growing Market	Asia-Pacific
Largest Market	Asia-Pacific
Forecast Units	Value (USD billion)
Report Scope	Market Dynamics, Revenue Forecast and Segmentation, Competitive Landscape and Recent Developments, Market Growth, Future Opportunities, and Trends
Key Market Drivers	Long working distances and high distance accuracy.
	A wide application range and Industry 4.0.

Who are the Top Companies in the Global Time-of-Flight (TOF) Sensor Market?

The market is highly fragmented and competitive. The brand identity associated with established companies, like Sony Corporation and STMicroelectronics NV, has a major influence in this market. Strong brands are synonymous with good performance, giving an upper hand to the long-standing. Furthermore, these major players are investing significantly in market expansion.

The significant players in the global TOF sensor market are,

- Texas Instruments Incorporated
- STMicroelectronics NV

- Infineon Technologies AG
- Panasonic Corporation
- Sony Corporation
- Teledyne Technologies International Corp.
- Keyence Corporation
- Sharp Corporation
- Omron Corporation
- Invensense Inc. (TDK Corporation)

Other Reports That Might Be of Your Interest:

- [Gas Sensor, Detector, and Analyzer Market Report](#) - The gas sensor, detector, and analyzer market size is estimated at USD 4.67 billion in 2023. It is expected to reach USD 6.13 billion by 2028, at a CAGR of 5.60% during the forecast period (2023-2028).
- [Temperature Sensors Market Report](#) - The global temperature sensors market size is expected to grow from USD 8.28 billion in 2023 to USD 11.23 billion by 2028, at a CAGR of 6.28% during the forecast period (2023-2028).

Key Highlights from the Global Time-of-Flight (TOF) Sensor Market Report:

Consumer Electronics: The Largest End User

- Smartphones, tablets, robots, cameras, smart speakers, and projectors use ToF sensors. They enhance smartphone features like facial recognition, auto-focus, blurring effects, and special effects. The growing smartphone subscriptions, which are expected to reach 7.51 billion units by 2026, are driving the growth of the ToF sensor market.
- Leading manufacturers like STMicroelectronics are developing new products to meet the growing demand. Samsung is working on a 3D ToF sensor for its smartphones that enhances face recognition and depth sensing.
- The growing adoption of smart homes also boosts the demand for ToF sensors in household/service robots. ToF sensors in robots can detect motion, work in any lighting condition, and provide accurate range measurements.
- In short, changing lifestyles, urbanization, and the penetration of smart products are expected to contribute to the growth of the market in the years ahead.

Asia-Pacific: The Largest Market for ToF Sensors

- China is the largest producer and exporter of consumer electronics, offering huge potential for the sector.
- Japan has a robust consumer electronics market. The country is witnessing widespread use of ToF sensors in VR headsets, gaming consoles, smartphones, and tablets.
- India's ToF sensor market is driven by the demand for premium smartphones, enhanced camera features, AR/VR apps, and AI capabilities.
- Southeast Asian countries and Australia also have the potential for significant market share. Countries like South Korea and Singapore are attracting companies to set up production centers by offering favorable conditions.

What are the Latest Developments in the Global Time-of-Flight (TOF) Sensor Market?

- In April 2023, Cognex Corporation released the In-Sight 3800 Vision System designed for high-speed production lines. It has powerful imaging capabilities to deliver a fully integrated solution for various inspection applications.
- In April 2023, Delta launched the high-speed DMV-T time of flight (ToF) smart camera with a Sony IMX image sensor that offers 60 frames per second capture speed and 640x480 p resolution.

Mordor Intelligence has Segmented the Global Time-of-Flight (TOF) Sensor Market Based on Type, Application, End-user Vertical, and Geography.

- By Type (Market Size and Forecast based on Value (USD billion), 2018-2028)
 - RF-modulated Light Sources with Phase Detectors
 - Range-Gated Imagers
 - Direct Time-of-Flight Imagers
- By Application (Market Size and Forecast based on Value (USD billion), 2018-2028)
 - Augmented Reality and Virtual Reality
 - LiDAR
 - Machine Vision
 - 3D Imaging and Scanning
 - Robotics and Drone
- By End-user Vertical (Market Size and Forecast based on Value (USD billion), 2018-2028)
 - Consumer Electronics
 - Automotive
 - Entertainment and Gaming
 - Industrial
 - Healthcare
 - Other End Users
- By Geography (Market Size and Forecast based on Value (USD billion), 2018-2028)
 - North America
 - United States
 - Canada
 - Europe
 - Germany
 - United Kingdom
 - France
 - Rest of Europe
 - Asia-Pacific
 - China
 - Japan
 - India

- Rest of Asia-Pacific
 - Latin America
 - Middle East & Africa

In a nutshell, the Mordor Intelligence market research report is a must-read for start-ups, industry players, investors, researchers, consultants, business strategists, and all those who are looking to understand this industry. Get a glance at the [Global Time-of-Flight \(TOF\) Sensor Market Report \(2023-2028\)](#).

Mordor Intelligence constantly tracks industry trends. Some relevant market reports from the analysts that might be of interest to you:

- [Wireless Sensors Market Report](#) - The global wireless sensors market size is estimated at USD 9.25 billion in 2023. It is expected to reach USD 30.07 billion by 2028, at a CAGR of 26.59% during the forecast period (2023-2028).
- [Agricultural Sensor Market Report](#) - The global agricultural sensor market size is estimated at USD 1.80 billion in 2023. It is expected to reach USD 3.10 billion by 2028, at a CAGR of 11.50% during the forecast period (2023-2028).
- [Wearable Sensors Market Report](#) - The global wearable sensors market size is estimated at USD 3.88 billion in 2023. It is expected to reach USD 6.97 billion by 2028, at a CAGR of 12.41% during the forecast period (2023-2028).

About Mordor Intelligence:

[Mordor Intelligence](#) is a market intelligence and advisory firm. At Mordor Intelligence, we believe in predicting butterfly effects that have the potential to change or significantly impact market dynamics.

Our market research reports are comprehensive and provide exclusive data, facts and figures, trends, and the competitive landscape of the industry.