

# **Image Sensor Market with COVID-19 Impact Analysis by Technology (CMOS Image Sensors), Processing Technique (3D Image Sensors), Spectrum, Array Type, Resolutions End User (Automotive, Consumer Electronics), and Geography - Global Forecast to 2025**

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## **Abstracts**

“Increase in incorporation of high-resolution cameras equipped with image sensors in mobile devices, growth in adoption of image cameras for automotive applications, and rise in use of image sensors in improved medical imaging solutions to drive the growth of image sensor market”

The image sensor market is projected to grow from USD 18.5 billion in 2020 to USD 28.0 billion by 2025, recording a CAGR of 8.6% between 2020 and 2025. Major factors driving the growth of the image sensor market include increase in incorporation of high-resolution cameras equipped with image sensors in mobile devices, growth in adoption of image cameras for automotive applications, and rise in use of image sensors in improved medical imaging solutions.

“Based on technology, CMOS image sensor to be the fastest-growing technology segment between 2020 and 2025”

In 2019, the CMOS image sensors segment accounted for the largest size of the image sensor market. This segment is projected to grow at the highest CAGR of 9.0% from 2020 to 2025. The key factors contributing to the growth of the CMOS image sensor segment are the advantages offered by these sensors. CMOS image sensors have replaced CCD image sensors in a wide range of applications owing to their low costs, less power consumption, ease of integration, and high-quality image output. Companies present in the market are developing CMOS image sensors with high resolution and

built-in artificial intelligence (AI) capabilities to create new revenue streams for them.

“Based on processing technique, 2D image sensor to hold the largest market share in 2025”

The key factor contributing to the growth of the 2D image sensors segment is the increased adoption of these sensors in consumer electronics, automotive, industrial, and medical applications. These image sensors use hyperspectral imaging to detect, recognize, and identify objects.

“Based on array type, area image sensors to be the fastest-growing application between 2020 and 2025”

The area image sensors segment is projected to lead the image sensor market from 2020 to 2025. The growth of this segment can be attributed to the increased adoption of area image sensors in smartphones, tablets, automobile cameras, and surveillance cameras. These imager sensors have low power consumption and offer features such as color noise reduction (CNR), high-dynamic range (HDR), and backside illumination (BSI).

“Based on spectrum, non-visible segment to be the fastest-growing application between 2020 and 2025”

The non-visible segment of the image sensor market is projected to grow at a higher CAGR than the visible segment during the forecast period. The key factor contributing to the growth of this segment is rise in demand for infrared image sensors for use in automotive applications. These sensors capture light from the infrared spectrum, which enables their use in night vision and low-light imaging applications. They offer visibility to drivers in dark conditions. Autonomous vehicles employ a large number of image sensors, including infrared image sensors for visibility in the dark, which is expected to drive the growth of the non-visible segment of the market.

“Based on end user, automotive segment to be the fastest-growing application between 2020 and 2025”

The automotive segment of the market is projected to grow at the highest CAGR from 2020 to 2025. The key factor contributing to the growth of this segment is the increasing safety concerns among automobile manufacturers. In automobiles, image sensors are

used in ADAS, driver monitoring systems, night vision systems, eMirrors, blind-spot detection systems, cabin monitoring systems, surrounding view systems, and parking assistance systems. These systems make the whole driving experience safe and comfortable. Moreover, the development of autonomous vehicles and their dependency on image sensors are expected to drive the growth of the image sensor market in near future.

In-depth interviews have been conducted with chief executive officers (CEOs), marketing directors, other innovation and technology directors, and executives from various key organizations operating in the image sensor marketplace.

By Company Type: Tier 1 – 52%, Tier 2 – 25%, and Tier 3 – 23%

By Designation: C-Level Executives – 55%, Directors – 27%, and Managers – 18%

By Region: North America – 40%, Europe – 20%, APAC – 28%, and RoW – 12%

Sony Corporation (Japan), Samsung Electronics Co., Ltd. (South Korea), OmniVision Technologies, Inc. (US), STMicroelectronics (Switzerland), ON Semiconductor Corporation (US), Panasonic Corporation (Japan), Canon Inc. (Japan), SK hynix Inc. (South Korea), PixArt Imaging Inc. (Taiwan), and Hamamatsu Photonics K.K. (Japan) are some of the key players in the image sensor market.

The study includes an in-depth competitive analysis of these key players in the image sensor market, with their company profiles, recent developments, and key market strategies.

## Research Coverage

The report defines, describes, and forecasts the image sensor market based on technology, processing technique, spectrum, array type, resolution, end user, and region. It provides detailed information regarding factors such as drivers, restraints, opportunities, and challenges influencing the growth of the image sensor market. It also analyzes product launches and developments, partnerships, collaborations, expansions, acquisitions, and technology developments carried out by the key players to grow in the market.

## Key Benefits of Buying the Report

This report will help market leaders/new entrants in this industry with information on the closest approximations of the revenue numbers for the overall image sensor market and the subsegments. The report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market strategies. The report will also help stakeholders to understand the pulse of the market and provide them with information on key market drivers, restraints, challenges, and opportunities.

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\*Details on Business Overview, Products Offered, Recent Developments, SWOT Analysis, MnM View might not be captured in case of unlisted companies.

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