

# **Silicon Photomultiplier Market with COVID-19 Impact Analysis, by Offering (NUV, RGB), Type (Analog, Digital), Application (LiDAR and 3D Ranging, BioPhotonics & Medical Imaging, High energy Physics), End User, and Geography - Global Forecast to 2026**

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## **Abstracts**

The silicon photomultiplier market is expected to grow from USD 120million in 2021 to USD 173million by 2026, at a CAGR of 7.6%. The market growth can be attributed to several factors, such as the increasing demand for silicon photomultipliers in medical imaging and growing use of SiPMs in LiDAR and 3D mapping technology.

The silicon photomultiplier market has historically been showcasing significant growth owing to the rapid adoption of silicon photomultipliers across key industry verticals such as healthcare, automotive, consumer electronics and telecommunication, aerospace, and oil & gas. However, due to the sudden onset of the COVID-19 pandemic, market growth declined and will continue to do so till the disrupted supply chains across the globe normalize. Post the COVID-19 pandemic, market growth will experience tremendous acceleration as there will be a huge requirement for silicon photomultipliers for applications such as medical imaging, LiDAR and 3D ranging, radiation detection & monitoring, and flow cytometry.

The NUV silicon photomultiplier segment is expected to exhibit a higher CAGR of the silicon photomultiplier market during the forecast period

Based on the offering, the silicon photomultiplier market has been divided into near ultraviolet silicon photomultiplier, and red, green blue silicon photomultiplier. Increasing

demand for NUV silicon photomultipliers in hospitals for medical imaging applications related to nuclear medicine, and the upsurge of COVID-19 infections are driving the growth of the NUV silicon photomultiplier segment.

Healthcare segment to hold the largest share of silicon photomultiplier market during the forecast period

Healthcare is one of the few sectors that experienced tremendous growth during the COVID-19 pandemic. Medical devices, imaging devices, medical services & managed care, and pharmaceuticals saw particularly significant growth.

Medical imaging is an important operational area within the healthcare sector that has been experiencing considerable growth even before the onset of the COVID-19 pandemic. This growth increased manifold during the pandemic, when the increased demand for diagnostic imaging saw a surge in the requirement for medical imaging devices such as PET scanners, X-ray machines, and MRI machines. Silicon photomultipliers are fundamental components of these imaging devices.

The analog silicon photomultiplier segment to hold the largest share of silicon photomultiplier market during the forecast period

On the basis of type, the market is categorized into digital silicon photomultiplier and analog silicon photomultiplier. The growing use of analog silicon photomultipliers in applications such as radiation detection and flow cytometry is responsible for the growth of the segment. Various countries across the world are ramping up their border security infrastructure to eliminate illegal nuclear arms trade. Analog silicon photomultipliers help detect residual radiation.

APAC is expected to register the highest CAGR in the market during the forecast period

Among all regions, APAC is expected to register the highest growth in the silicon photomultiplier market during the forecast period. Growth in medical infrastructure across various countries in this region is expected to propel the growth of silicon photomultipliers. China, India, South Korea, and Japan ramped up the availability of various medical imaging devices in hospitals and clinics to effectively deal with the COVID-19 pandemic. Therefore, as the demand for these imaging devices went up, the demand for silicon photomultipliers also increased manifold.

Breakdown of primary participants:

By Company Type: Tier 1 = 35%, Tier 2 = 45%, and Tier 3 = 20%

By Designation: C-Level Executives = 20%, Directors = 35%, and Others = 45%

By Region: North America = 30%, Europe = 25%, APAC = 40%, and RoW = 5%

Some of the major players in the silicon photomultiplier market include ON Semiconductor (US), Broadcom (US), Hamamatsu Photonics (Japan), First Sensor (Germany), KETEK GmbH (Germany), AdvanSiD (Italy), Cremat (US), Excelitas Technologies (US), and so on.

#### Research Coverage:

In this report, the silicon photomultiplier market has been segmented on the basis of offering, type, end user, application, and region. The report also discusses the drivers, restraints, opportunities, and challenges pertaining to the market. It gives a detailed view of the market across four main regions—North America, Europe, APAC, and RoW. Value chain analysis has been included in the report, along with the key players and their competitive analysis in the silicon photomultiplier ecosystem.

#### Key Benefits to Buy the Report:

This report includes statistics for the silicon photomultiplier market based on offering, type, end user, application, and region, along with their respective market sizes.

Value chain analysis and key industry trends have been provided for the market.

Major drivers, restraints, opportunities, and challenges for the silicon photomultiplier market have been provided in detail in this report.

This report would help stakeholders to understand their competitors better and gain more insights to enhance their position in the market. The competitive landscape section includes the competitor ecosystem and the recent development strategies adopted by the key players in the market, such as new product launches, acquisitions, collaborations, agreements, and partnerships.

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