Report Information

More information from: https://www.marketresearchfuture.com/reports/optoelectronics-market-5904

Optoelectronics Market Research Report – Forecast to 2027

Report / Search Code: MRFR/SEM/4448-HCR **Publish Date:** April, 2023

Request Sample

Price	1-user PDF : $ 4950.0	Enterprise PDF : $ 7250.0

Description:

Optoelectronics Market Size and Overview

Globally, the size of Optoelectronics Market is set to grow at a CAGR of 12%, estimated to reach USD 75 Billion by 2027 driven by the rising use of infrared components in electronic items such as thermal imaging systems, cameras, etc. for automobile positioning systems is a major driver for the market. Optoelectronics is the method of application to measure the mechanical effects of light in electronic devices. This process mainly focuses on light-detecting or light-emitting devices.

The rising use of infrared components in various consumer electronic items such as thermal imaging systems, and cameras in the industrial sectors is majorly driving the Optoelectronics System. Optoelectronic devices are majorly used for various purposes such as telecommunication, automatic access control system, medical equipment, and the military as well. Some of the popular optometric devices are- blue lasers, solar cells, optical fibers, photodiodes, and LED traffic lights.

They are also used for solar energy projects such as solar power charge controllers, auto irrigation systems, sun-tracking solar panels, etc. It is projected that the Asia-Pacific region will hold the largest market share in the Optoelectronics Industry in the forthcoming years. Hence, due to its diverse uses, the demand for the Optoelectronics System is also rising rapidly.

COVID-19 Analysis

At the beginning of 2020, the cases of COVID-19 disease increased significantly. It further led to the shutdown of industries, and manufacturing units, for several months. Even the movement across borders was also restricted. Due to this reason, the economies around the world were highly impacted. However, the development of vaccines in the early stages of 2021 has helped to slow down the spread. Hence, it is anticipated that if the cases began to slow down, then the Optoelectronics Market will have significant growth during the forecast period.

Market Dynamics

Market Drivers

The Optoelectronics Market is expected to have significant growth in the upcoming years. The growing demand for optoelectronic items for various uses such as surgical procedures, military, optical memories, etc. They are also used for LAN, CD Players, and several electrical projects. However, the rising use of infrared components in electronic items such as thermal imaging systems, cameras, etc. for automobile positioning systems is a major driver for the market.

Market Restraints

Significant restraint for the Optoelectronics Market is projected to hamper the market. The high costs for acquisition and deployment will hinder the growth. Along with that, complicated usage and a high customization rate will further have a negative impact on the market growth.

Market Opportunities

The main benefit of Optoelectronics Systems is the high-quality performance as compared to traditional electronics. It also provides consistency in delivering efficient solutions effectively. It can also be used for designing satellites as it provides high bandwidth for strong connections. The technological advancements in the LED components will also drove the market. Furthermore, they are also profitable for aerospace and military purposes.

Market Challenges

There are some factors that are expected to evolve as a challenge for the market players. The boundaries of thermal testing and the development of optoelectronic devices will restrict the market growth at a certain rate.

Cumulative Analysis

According to the Optoelectronics Market Forecast, the Compound Annual Growth Rate of the market is projected to reach around 12%. Hence, the market value will reach up to 75 Billion during the forecast period 2017-2023. The diverse uses in the military, telecommunication, and aerospace will drive the market significantly. It is projected that

the Asia-Pacific region will lead the market of optoelectronics devices.

Value Chain Analysis

With the rising demand for optoelectronics in various sectors such as telecommunication, consumer electronic devices, etc. the market value will further increase significantly. Thus, the rising demand in countries such as Japan, India, and China will expand in the upcoming years. Hence, the value chain of the Applied Optoelectronics Market is going to develop in the forthcoming years.

Market Segmentation Overview

The market segment of the Optoelectronics Market is divided into the light source, components, and industry. On the basis of Light Source, the Optoelectronics Market is divided into Visible Light, Ultraviolet, X-Rays, and Infrared.

On the basis of Components, the Optoelectronics Market is segment is divided into Photovoltaic Cells, Optocouplers, Infrared Components, Laser Diodes, Image Sensors, LED, and others

On the basis of Industry, the Optoelectronics Market is bifurcated into Telecommunication, Automotive, Defense and Aerospace, Consumer Electronics, Healthcare, and others

Regional Analysis

The Optoelectronics Market Size on the basis of region is divided into North America, Europe, Asia-Pacific, and the Middle East, and Africa. According to the Optoelectronics Market Analysis, the Asia-Pacific region will hold the largest market share in the upcoming years. The growing presence of several major companies in countries such as India, China, Japan, Taiwan, and South Korea are driving the market. Along with that, the rising use of various components in consumer electronics is also fuelling the Optoelectronics Market Growth.

Furthermore, the North American region also holds a significant Optoelectronics Market Share during the forecast period. Some positive factors such as durability and low power consumption are the major reason for the growing demand in this region. Along with that, the presence of major key players and the availability of skilled laborers will be helpful to provide cost-effective solutions.

Competitive Landscape

The market players in the Applied Optoelectronics Market use various market strategies to enhance their portfolios. The key players did mergers, acquisitions, partnerships new product launches, expansion, etc. that are fuelling the market growth. Some of the key players of the Optoelectronics System are-

- Sony Corporation (Japan)
- Samsung Electronics (South Korea)
- Koninklijke Phillips N.V. (Netherlands)
- Osram Licht AG (Germany)
- General Electric Company (US)
- Sharp Corporation (Japan)
- OmniVision Technologies Inc. (US)
- Cree Inc. (US)
- ON Semiconductor (US)
- Vishay Technology Inc. (US)

Recent Developments

- In 2018, November, the Solid-state PLC announced the acquisition of Pacer Technologies which is a specialist company in displays and optoelectronics.
- In November, OSRAM Company announced the beginning of operations of a new factory of LED chip in Kulim (Malaysia). An investment of USD 345 million was made by the company for the completion of the first stage.

Report Overview

The overview of the Optoelectronics Market Report is as follows-

- Market Overview
- COVID-19 Analysis
- Dynamics of the Market
- Value Chain Analysis
- Market Segmentation

- Regional Analysis
- Competitive Analysis
- Recent Development

The score of the report is to provide important details about the growth of optoelectronics. The report highlights the market opportunities, drivers, challenges, etc. The report also covers brief information about the recent developments by the key players. The information provided in this report is collected through primary and secondary sources.

Market Segmentation Insights

By Light Source Outlook

- Visible Light
- Ultraviolet
- X-Rays
- Infrared

By Components Outlook

- Photovoltaic Cells
- Optocouplers
- Infrared Components
- Laser Diodes
- Image Sensors
- LED
- Others

By Industry Outlook

- Telecommunication
- Automotive
- Defense and Aerospace
- Consumer Electronics
- Healthcare
- Others

By Region Outlook

- North America
- Asia-Pacific
- Europe
- Rest of the World

Table of Content:

LIST OF TABLES

LIST OF FIGURES