

Optoelectronics Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028F Segmented By Component (Light-Emitting Diode (LED), Laser Diode, Sensors, Optocouplers, Photovoltaic Cells, Others), By Material (Gallium Nitride, Gallium Arsenide, Gallium Phosphide, Silicon Germanium, Silicon Carbide, Indium Phosphide), By End-User (Automotive, Aerospace & Defense, Consumer Electronics, Information Technology, Healthcare, Others), By Region, Competition

<https://marketpublishers.com/r/O6EF089580ADEN.html>

Date: September 2023

Pages: 180

Price: US\$ 4,900.00 (Single User License)

ID: O6EF089580ADEN

Abstracts

The global optoelectronics market is expected to expand in the upcoming years as a result of rising demand for optical solutions in the healthcare and automotive industries, rising demand for smart consumer electronics devices, and rising demand for long-lasting and low-power consuming components. However, high initial manufacturing and fabrication costs are expected to stifle market growth. Because of the proliferation of IIoT platforms, advancements in Li-Fi technology, and innovations in optoelectronic devices, the market is expected to see enormous growth opportunities.

Optoelectronics is the technology for light-emitting as well as light-detecting devices. The technology is widely considered a sub-discipline of photonics, basically applying the physical science of light. Optoelectronics is quickly becoming a fast-emerging technology field that involves using electronic devices to source, detect, and control light. These devices can be a part of numerous applications, including automatic access control systems, military services, medical equipment, and telecommunications. The

optoelectronics field is widely broad ranged along with the variations in the devices that includes image pick-up devices, elements and LEDs, optical storage, information displays, remote sensing systems, and optical communication systems. The most common optoelectronic devices that directly converts the photons and electrons are LEDs, solar cells and photodiodes & laser-diodes.

Increased Demand for Miniaturized Electronic Devices is Fueling the Market Growth

The global optoelectronics market is escalating at a very high rate due to the growing demand for miniaturized semiconductor components such as ICs (Integrated Circuits). The consumer electronics industry is focusing on manufacturing miniaturized personal electronics using nanotechnology-based semiconductor chips, which have high efficiency and are less power-consuming. The semiconductor components manufactured from the photolithography equipment include ICs, semiconductor chips, sensors, and LED displays. Therefore, the growing demand for miniaturized electronic devices, is in turn anticipated to grow the adoption of high efficiency optoelectronics products for the forecast period.

Expansion of Semiconductor Industry is Driving the Market Growth

The emergence of advanced consumer products in the consumer electronics industry is expected to drive the global optoelectronics market during the forecast period. The transition of electronic goods from fully automated systems toward the emergence of a smart home that interconnects all the household devices to create a single controlling unit is expected to result in the high adoption of electronics products based on the light applications which, in turn, is expected to drive the growth of the global optoelectronics market.

Growing Strategic Partnerships are Driving the Market Growth

Strategic partnerships are happening in the market, shaping the optoelectronics market for the technologically developed population. Many companies operating in optoelectronics are undergoing partnerships to meet customer demands. For instance, in 2019, LITE-ON technology corporation, an optoelectronics components manufacturing company, signed a strategic partnership agreement with II-VI Incorporated, one of the lead manufacturers of optical materials and semiconductors in America. This partnership is expected to manufacture at high volume and commercialize packaged semiconductor lasers for capturing the mass market of light detection and ranging (LiDAR). Similarly, in 2021, Global Foundries, a semiconductor

manufacturing company, improved and continued its strategic partnership with Raytheon, a commercial electronics manufacturing company, to develop a new gallium nitride on silicon.

Increasing Demand for Luxury and Ultra-Luxury Vehicles is Propelling the Market Growth

The increasing demand for luxury and ultra-luxury vehicles is expected to drive the growth of the optoelectronics market. Luxury vehicles refer to vehicles that provide comfort, luxury, and quality. The motivation to improve the safety and lighting of the vehicles and the continuous focus on the R&D activities is expected to lead to the growth of optoelectronics in luxury vehicles. Optoelectronics is used in new cars to automate the vehicle functions such as brake lights and headlights. As a result, increasing sales of luxury and ultra-luxury vehicles increase the demand for the optoelectronics market. According to FADA (Federation of Automobile Dealers Associations), a national body representing automobile dealers in India, in Dec 2021, retail luxury car sales increased by 19.7% due to high inventory and dealership growth with the OEMs. Therefore, the increasing sales of luxury and ultra-luxury vehicles drive the optoelectronics market.

Market Segmentation

Based on component, the market is fragmented into light-emitting diode (LED), laser diode, sensors, optocouplers, photovoltaic cells, and others. Based on material, the market is further split into gallium nitride, gallium arsenide, gallium phosphide, silicon germanium, silicon carbide and indium phosphide. Based on the end-user, the market is segmented into automotive, aerospace & defense, consumer electronics, information technology, healthcare and others. On the basis of region, the market is divided into North America, Europe, Asia-Pacific, South America, and Middle East & Africa.

Company Profiles

General Electric Company, Panasonic Corporation, Samsung Electronics, Omnivision Technologies Inc., Sony Corporation, Hamamatsu Photonics K.K., Osram Licht AG, ON Semiconductor, Texas Instruments, Micropac Industries, are among the major market players driving the growth of the global optoelectronics market.

Report Scope:

In this report, the global optoelectronics market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Optoelectronics Market, By Component:

Light-Emitting Diode (LED)

Laser Diode

Sensors

Optocouplers

Photovoltaic Cells

Others

Optoelectronics Market, By Material:

Gallium Nitride

Gallium Arsenide

Gallium Phosphide

Silicon Germanium

Silicon Carbide

Indium Phosphide

Optoelectronics Market, By End User:

Automotive

Aerospace & Defense

Consumer Electronics

Information Technology

Healthcare

Others

Optoelectronics Market, By Region:

Asia-Pacific

China

Japan

India

Australia

South Korea

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Spain

Italy

Middle East & Africa

Israel

Turkey

Saudi Arabia

UAE

South America

Brazil

Argentina

Colombia

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the global optoelectronics market.

Available Customizations:

With the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. SERVICE OVERVIEW

2. RESEARCH METHODOLOGY

3. IMPACT OF COVID-19 ON GLOBAL OPTOELECTRONICS MARKET

4. EXECUTIVE SUMMARY

5. VOICE OF CUSTOMERS

6. GLOBAL OPTOELECTRONICS MARKET OUTLOOK

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Component (Light-Emitting Diode (LED), Laser Diode, Sensors, Optocouplers, Photovoltaic Cells, Others)

6.2.2. By Material (Gallium Nitride, Gallium Arsenide, Gallium Phosphide, Silicon Germanium, Silicon Carbide, Indium Phosphide)

6.2.3. By End-User (Automotive, Aerospace & Defense, Consumer Electronics, Information Technology, Healthcare, Others)

6.2.4. By Region

6.3. By Company (2022)

6.4. Market Map

7. NORTH AMERICA OPTOELECTRONICS MARKET OUTLOOK

7.1. Market Size & Forecast

7.1.1. By Value

7.2. Market Share & Forecast

7.2.1. By Component

7.2.2. By Material

7.2.3. By End-User

7.2.4. By Country

7.3. North America: Country Analysis

7.3.1. United States Optoelectronics Market Outlook

7.3.1.1. Market Size & Forecast

7.3.1.1.1. By Value

7.3.1.2. Market Share & Forecast

7.3.1.2.1. By Component

7.3.1.2.2. By Material

7.3.1.2.3. By End-User

7.3.2. Canada Optoelectronics Market Outlook

7.3.2.1. Market Size & Forecast

7.3.2.1.1. By Value

7.3.2.2. Market Share & Forecast

7.3.2.2.1. By Component

7.3.2.2.2. By Material

7.3.2.2.3. By End-User

7.3.3. Mexico Optoelectronics Market Outlook

7.3.3.1. Market Size & Forecast

7.3.3.1.1. By Value

7.3.3.2. Market Share & Forecast

7.3.3.2.1. By Component

7.3.3.2.2. By Material

7.3.3.2.3. By End-User

8. ASIA-PACIFIC OPTOELECTRONICS MARKET OUTLOOK

8.1. Market Size & Forecast

8.1.1. By Value

8.2. Market Share & Forecast

8.2.1. By Component

8.2.2. By Material

8.2.3. By End-User

8.2.4. By Country

8.3. Asia-Pacific: Country Analysis

8.3.1. China Optoelectronics Market Outlook

8.3.1.1. Market Size & Forecast

8.3.1.1.1. By Value

8.3.1.2. Market Share & Forecast

- 8.3.1.2.1. By Component
- 8.3.1.2.2. By Material
- 8.3.1.2.3. By End-User
- 8.3.2. Japan Optoelectronics Market Outlook
 - 8.3.2.1. Market Size & Forecast
 - 8.3.2.1.1. By Value
 - 8.3.2.2. Market Share & Forecast
 - 8.3.2.2.1. By Component
 - 8.3.2.2.2. By Material
 - 8.3.2.2.3. By End-User
- 8.3.3. South Korea Optoelectronics Market Outlook
 - 8.3.3.1. Market Size & Forecast
 - 8.3.3.1.1. By Value
 - 8.3.3.2. Market Share & Forecast
 - 8.3.3.2.1. By Component
 - 8.3.3.2.2. By Material
 - 8.3.3.2.3. By End-User
- 8.3.4. India Optoelectronics Market Outlook
 - 8.3.4.1. Market Size & Forecast
 - 8.3.4.1.1. By Value
 - 8.3.4.2. Market Share & Forecast
 - 8.3.4.2.1. By Component
 - 8.3.4.2.2. By Material
 - 8.3.4.2.3. By End-User
- 8.3.5. Australia Optoelectronics Market Outlook
 - 8.3.5.1. Market Size & Forecast
 - 8.3.5.1.1. By Value
 - 8.3.5.2. Market Share & Forecast
 - 8.3.5.2.1. By Component
 - 8.3.5.2.2. By Material
 - 8.3.5.2.3. By End-User

9. EUROPE OPTOELECTRONICS MARKET OUTLOOK

- 9.1. Market Size & Forecast
 - 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Component
 - 9.2.2. By Material

9.2.3. By End-User

9.2.4. By Country

9.3. Europe: Country Analysis

9.3.1. Germany Optoelectronics Market Outlook

9.3.1.1. Market Size & Forecast

9.3.1.1.1. By Value

9.3.1.2. Market Share & Forecast

9.3.1.2.1. By Component

9.3.1.2.2. By Material

9.3.1.2.3. By End-User

9.3.2. United Kingdom Optoelectronics Market Outlook

9.3.2.1. Market Size & Forecast

9.3.2.1.1. By Value

9.3.2.2. Market Share & Forecast

9.3.2.2.1. By Component

9.3.2.2.2. By Material

9.3.2.2.3. By End-User

9.3.3. France Optoelectronics Market Outlook

9.3.3.1. Market Size & Forecast

9.3.3.1.1. By Value

9.3.3.2. Market Share & Forecast

9.3.3.2.1. By Component

9.3.3.2.2. By Material

9.3.3.2.3. By End-User

9.3.4. Italy Optoelectronics Market Outlook

9.3.4.1. Market Size & Forecast

9.3.4.1.1. By Value

9.3.4.2. Market Share & Forecast

9.3.4.2.1. By Component

9.3.4.2.2. By Material

9.3.4.2.3. By End-User

9.3.5. Spain Optoelectronics Market Outlook

9.3.5.1. Market Size & Forecast

9.3.5.1.1. By Value

9.3.5.2. Market Share & Forecast

9.3.5.2.1. By Component

9.3.5.2.2. By Material

9.3.5.2.3. By End-User

10. SOUTH AMERICA OPTOELECTRONICS MARKET OUTLOOK

10.1. Market Size & Forecast

10.1.1. By Value

10.2. Market Share & Forecast

10.2.1. By Component

10.2.2. By Material

10.2.3. By End-User

10.2.4. By Country

10.3. South America: Country Analysis

10.3.1. Brazil Optoelectronics Market Outlook

10.3.1.1. Market Size & Forecast

10.3.1.1.1. By Value

10.3.1.2. Market Share & Forecast

10.3.1.2.1. By Component

10.3.1.2.2. By Material

10.3.1.2.3. By End-User

10.3.2. Argentina Optoelectronics Market Outlook

10.3.2.1. Market Size & Forecast

10.3.2.1.1. By Value

10.3.2.2. Market Share & Forecast

10.3.2.2.1. By Component

10.3.2.2.2. By Material

10.3.2.2.3. By End-User

10.3.3. Colombia Optoelectronics Market Outlook

10.3.3.1. Market Size & Forecast

10.3.3.1.1. By Value

10.3.3.2. Market Share & Forecast

10.3.3.2.1. By Component

10.3.3.2.2. By Material

10.3.3.2.3. By End-User

11. MIDDLE EAST & AFRICA OPTOELECTRONICS MARKET OUTLOOK

11.1. Market Size & Forecast

11.1.1. By Value

11.2. Market Share & Forecast

11.2.1. By Component

11.2.2. By Material

- 11.2.3. By End-User
- 11.2.4. By Country
- 11.3. Middle East & Africa: Country Analysis
 - 11.3.1. Israel Optoelectronics Market Outlook
 - 11.3.1.1. Market Size & Forecast
 - 11.3.1.1.1. By Value
 - 11.3.1.2. Market Share & Forecast
 - 11.3.1.2.1. By Component
 - 11.3.1.2.2. By Material
 - 11.3.1.2.3. By End-User
 - 11.3.2. Turkey Optoelectronics Market Outlook
 - 11.3.2.1. Market Size & Forecast
 - 11.3.2.1.1. By Value
 - 11.3.2.2. Market Share & Forecast
 - 11.3.2.2.1. By Component
 - 11.3.2.2.2. By Material
 - 11.3.2.2.3. By End-User
 - 11.3.3. UAE Optoelectronics Market Outlook
 - 11.3.3.1. Market Size & Forecast
 - 11.3.3.1.1. By Value
 - 11.3.3.2. Market Share & Forecast
 - 11.3.3.2.1. By Component
 - 11.3.3.2.2. By Material
 - 11.3.3.2.3. By End-User
 - 11.3.4. Saudi Arabia Optoelectronics Market Outlook
 - 11.3.4.1. Market Size & Forecast
 - 11.3.4.1.1. By Value
 - 11.3.4.2. Market Share & Forecast
 - 11.3.4.2.1. By Component
 - 11.3.4.2.2. By Material
 - 11.3.4.2.3. By End-User

12. MARKET DYNAMICS

- 12.1. Drivers
 - 12.1.1. Increased demand for miniaturized electronic device
 - 12.1.2. Expansion of semiconductor industry
 - 12.1.3. Growing strategic partnerships
- 12.2. Challenges

12.2.1. High manufacturing costs

12.2.2. Lack of skilled manpower

13. MARKET TRENDS & DEVELOPMENTS

13.1. Increasing demand for luxury and ultra-luxury vehicles

13.2. Growing government initiatives

13.3. Rising demand for optical solutions in healthcare industry

13.4. Expanding consumer electronics sector

13.5. Trend of rising sensor technology in electronics products

14. MERGERS& ACQUISITIONS/RECENT DEVELOPMENTS/NEW ENTRANTS

15. COMPANY PROFILES

15.1. General Electric Company

15.1.1. Business Overview

15.1.2. Key Revenue & Financials

15.1.3. Recent Developments

15.1.4. Key Personnel

15.1.5. Key Product/Service Offered

15.2. Panasonic Corporation

15.2.1. Business Overview

15.2.2. Key Revenue & Financials

15.2.3. Recent Developments

15.2.4. Key Personnel

15.2.5. Key Product/Service Offered

15.3. Samsung Electronics

15.3.1. Business Overview

15.3.2. Key Revenue & Financials

15.3.3. Recent Developments

15.3.4. Key Personnel

15.3.5. Key Product/Service Offered

15.4. Omnivision Technologies Inc.

15.4.1. Business Overview

15.4.2. Key Revenue & Financials

15.4.3. Recent Developments

15.4.4. Key Personnel

- 15.4.5. Key Product/Service Offered
- 15.5. Sony Corporation
 - 15.5.1. Business Overview
 - 15.5.2. Key Revenue & Financials
 - 15.5.3. Recent Developments
 - 15.5.4. Key Personnel
 - 15.5.5. Key Product/Service Offered
- 15.6. Hamamatsu Photonics K.K.
 - 15.6.1. Business Overview
 - 15.6.2. Key Revenue & Financials
 - 15.6.3. Recent Developments
 - 15.6.4. Key Personnel
 - 15.6.5. Key Product/Service Offered
- 15.7. Osram Licht AG
 - 15.7.1. Business Overview
 - 15.7.2. Key Revenue & Financials
 - 15.7.3. Recent Developments
 - 15.7.4. Key Personnel
 - 15.7.5. Key Product/Service Offered
- 15.8. ON Semiconductor
 - 15.8.1. Business Overview
 - 15.8.2. Key Revenue & Financials
 - 15.8.3. Recent Developments
 - 15.8.4. Key Personnel
 - 15.8.5. Key Product/Service Offered
- 15.9. Texas Instruments
 - 15.9.1. Business Overview
 - 15.9.2. Key Revenue & Financials
 - 15.9.3. Recent Developments
 - 15.9.4. Key Personnel
 - 15.9.5. Key Product/Service Offered
- 15.10. Micropac Industries
 - 15.10.1. Business Overview
 - 15.10.2. Key Revenue & Financials
 - 15.10.3. Recent Developments
 - 15.10.4. Key Personnel
 - 15.10.5. Key Product/Service Offered

16. STRATEGIC RECOMMENDATIONS

17. ABOUT US & DISCLAIMER

(Note: The companies list can be customized based on the client requirements.)

I would like to order

Product name: Optoelectronics Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028F Segmented By Component (Light-Emitting Diode (LED), Laser Diode, Sensors, Optocouplers, Photovoltaic Cells, Others), By Material (Gallium Nitride, Gallium Arsenide, Gallium Phosphide, Silicon Germanium, Silicon Carbide, Indium Phosphide), By End-User (Automotive, Aerospace & Defense, Consumer Electronics, Information Technology, Healthcare, Others), By Region, Competition

Product link: <https://marketpublishers.com/r/O6EF089580ADEN.html>

Price: US\$ 4,900.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/O6EF089580ADEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms

& Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970