

# Global Laser Diode Market by Size, by Type, by Application, by Region, History and Forecast 2019-2030

https://marketpublishers.com/r/GEC39182B738EN.html

Date: April 2024 Pages: 134 Price: US\$ 3,950.00 (Single User License) ID: GEC39182B738EN

# Abstracts

Laser diodes are electrically pumped semiconductor lasers in which the gain is generated by an electrical current flowing through a p–n junction or (more frequently) a p–i–n structure. In such a heterostructure, electrons and holes can recombine, releasing the energy portions as photons. This process can be spontaneous, but can also be stimulated by incident photons, in effect leading to optical amplification, and with optical feedback in a laser resonator to laser oscillation.

The laser diode has electrons and positive holes combined to create light from the PN junction when a PN junction is made by combining an N-Type semiconductor & P-Type semiconductor while afterwards, having the currents injected as a forward current.

According to APO Research, The global Laser Diode market is projected to grow from US\$ million in 2024 to US\$ million by 2030, at a Compound Annual Growth Rate (CAGR) of % during the forecast period.

Global Laser Diode key players include Sony, Nichia, Sharp, Ushio, Osram, etc. Global top five manufacturers hold a share over 65%.

North America is the largest market, with a share over 25%, followed by Europe and China, have a share over 35 percent.

In terms of product, Blue Laser Diode is the largest segment, with a share about 30%. And in terms of application, the largest application is Industrial Applications, followed by Optical Storage & Display, Telecom & Communication, Medical Application, etc.



In terms of production side, this report researches the Laser Diode production, growth rate, market share by manufacturers and by region (region level and country level), from 2019 to 2024, and forecast to 2030.

In terms of consumption side, this report focuses on the sales of Laser Diode by region (region level and country level), by company, by type and by application. from 2019 to 2024 and forecast to 2030.

This report presents an overview of global market for Laser Diode, capacity, output, revenue and price. Analyses of the global market trends, with historic market revenue or sales data for 2019 - 2023, estimates for 2024, and projections of CAGR through 2030.

This report researches the key producers of Laser Diode, also provides the consumption of main regions and countries. Of the upcoming market potential for Laser Diode, and key regions or countries of focus to forecast this market into various segments and sub-segments. Country specific data and market value analysis for the U.S., Canada, Mexico, Brazil, China, Japan, South Korea, Southeast Asia, India, Germany, the U.K., Italy, Middle East, Africa, and Other Countries.

This report focuses on the Laser Diode sales, revenue, market share and industry ranking of main manufacturers, data from 2019 to 2024. Identification of the major stakeholders in the global Laser Diode market, and analysis of their competitive landscape and market positioning based on recent developments and segmental revenues. This report will help stakeholders to understand the competitive landscape and gain more insights and position their businesses and market strategies in a better way.

This report analyzes the segments data by type and by application, sales, revenue, and price, from 2019 to 2030. Evaluation and forecast the market size for Laser Diode sales, projected growth trends, production technology, application and end-user industry.

Descriptive company profiles of the major global players, including Sony, Nichia, Sharp, Ushio, Osram, TOPTICA Photonics, Egismos Technology, Arima Lasers and Ondax, etc.

Laser Diode segment by Company

Sony



Nichia

Sharp

Ushio

Osram

**TOPTICA** Photonics

Egismos Technology

Arima Lasers

Ondax

Panasonic

ROHM

Hamamatsu

Newport Corp

Finisar

Mitsubishi Electric

Huaguang Photoelectric

QSI

Laser Diode segment by Type

Blue Laser Diode

Red Laser Diode



Infrared Laser Diode

Other Laser Diode

Laser Diode segment by Application

Optical Storage & Display

Telecom & Communication

Industrial Applications

**Medical Application** 

Other

Laser Diode segment by Region

North America

U.S.

Canada

Europe

Germany

France

U.K.

Italy

Russia

Asia-Pacific

Global Laser Diode Market by Size, by Type, by Application, by Region, History and Forecast 2019-2030



China

Japan

South Korea

India

Australia

China Taiwan

Indonesia

Thailand

Malaysia

Latin America

Mexico

Brazil

Argentina

Middle East & Africa

Turkey

Saudi Arabia

UAE

**Study Objectives** 

1. To analyze and research the global status and future forecast, involving, production,

Global Laser Diode Market by Size, by Type, by Application, by Region, History and Forecast 2019-2030



value, consumption, growth rate (CAGR), market share, historical and forecast.

2. To present the key manufacturers, capacity, production, revenue, market share, and Recent Developments.

3. To split the breakdown data by regions, type, manufacturers, and Application.

4. To analyze the global and key regions market potential and advantage, opportunity and challenge, restraints, and risks.

5. To identify significant trends, drivers, influence factors in global and regions.

6. To analyze competitive developments such as expansions, agreements, new product launches, and acquisitions in the market.

Reasons to Buy This Report

1. This report will help the readers to understand the competition within the industries and strategies for the competitive environment to enhance the potential profit. The report also focuses on the competitive landscape of the global Laser Diode market, and introduces in detail the market share, industry ranking, competitor ecosystem, market performance, new product development, operation situation, expansion, and acquisition. etc. of the main players, which helps the readers to identify the main competitors and deeply understand the competition pattern of the market.

2. This report will help stakeholders to understand the global industry status and trends of Laser Diode and provides them with information on key market drivers, restraints, challenges, and opportunities.

3. This report will help stakeholders to understand competitors better and gain more insights to strengthen their position in their businesses. The competitive landscape section includes the market share and rank (in volume and value), competitor ecosystem, new product development, expansion, and acquisition.

4. This report stays updated with novel technology integration, features, and the latest developments in the market.

5. This report helps stakeholders to gain insights into which regions to target globally.



6. This report helps stakeholders to gain insights into the end-user perception concerning the adoption of Laser Diode.

7. This report helps stakeholders to identify some of the key players in the market and understand their valuable contribution.

**Chapter Outline** 

Chapter 1: Provides an overview of the Laser Diode market, including product definition, global market growth prospects, production value, capacity, and average price forecasts (2019-2030).

Chapter 2: Analysis key trends, drivers, challenges, and opportunities within the global Laser Diode industry.

Chapter 3: Detailed analysis of Laser Diode market competition landscape. Including Laser Diode manufacturers' output value, output and average price from 2019 to 2024, as well as competition analysis indicators such as origin, product type, application, merger and acquisition information, etc.

Chapter 4: Provides the analysis of various market segments by type, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different market segments.

Chapter 5: Provides the analysis of various market segments by application, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different downstream markets.

Chapter 6: Provides profiles of key players, introducing the basic situation of the main companies in the market in detail, including product production/output, value, price, gross margin, product introduction, recent development, etc.

Chapter 7: Production/Production Value of Laser Diode by region. It provides a quantitative analysis of the market size and development potential of each region in the next six years.

Chapter 8: Consumption of Laser Diode in regional level and country level. It provides a quantitative analysis of the market size and development potential of each region and its main countries and introduces the market development, future development



prospects, market space, and production of each country in the world.

Chapter 9: Analysis of industrial chain, including the upstream and downstream of the industry.

Chapter 10: Concluding Insights of the report.



# Contents

#### **1 MARKET OVERVIEW**

- 1.1 Product Definition
- 1.2 Global Market Growth Prospects
- 1.2.1 Global Laser Diode Production Value Estimates and Forecasts (2019-2030)
- 1.2.2 Global Laser Diode Production Capacity Estimates and Forecasts (2019-2030)
- 1.2.3 Global Laser Diode Production Estimates and Forecasts (2019-2030)
- 1.2.4 Global Laser Diode Market Average Price (2019-2030)
- 1.3 Assumptions and Limitations
- 1.4 Study Goals and Objectives

## 2 GLOBAL LASER DIODE MARKET DYNAMICS

- 2.1 Laser Diode Industry Trends
- 2.2 Laser Diode Industry Drivers
- 2.3 Laser Diode Industry Opportunities and Challenges
- 2.4 Laser Diode Industry Restraints

## **3 LASER DIODE MARKET BY MANUFACTURERS**

- 3.1 Global Laser Diode Production Value by Manufacturers (2019-2024)
- 3.2 Global Laser Diode Production by Manufacturers (2019-2024)
- 3.3 Global Laser Diode Average Price by Manufacturers (2019-2024)
- 3.4 Global Laser Diode Industry Manufacturers Ranking, 2022 VS 2023 VS 2024
- 3.5 Global Laser Diode Key Manufacturers Manufacturing Sites & Headquarters
- 3.6 Global Laser Diode Manufacturers, Product Type & Application
- 3.7 Global Laser Diode Manufacturers Commercialization Time
- 3.8 Market Competitive Analysis
- 3.8.1 Global Laser Diode Market CR5 and HHI

3.8.2 Global Top 5 and 10 Laser Diode Players Market Share by Production Value in 2023

3.8.3 2023 Laser Diode Tier 1, Tier 2, and Tier

## 4 LASER DIODE MARKET BY TYPE

- 4.1 Laser Diode Type Introduction
  - 4.1.1 Blue Laser Diode



- 4.1.2 Red Laser Diode
- 4.1.3 Infrared Laser Diode
- 4.1.4 Other Laser Diode
- 4.2 Global Laser Diode Production by Type
- 4.2.1 Global Laser Diode Production by Type (2019 VS 2023 VS 2030)
- 4.2.2 Global Laser Diode Production by Type (2019-2030)
- 4.2.3 Global Laser Diode Production Market Share by Type (2019-2030)
- 4.3 Global Laser Diode Production Value by Type
- 4.3.1 Global Laser Diode Production Value by Type (2019 VS 2023 VS 2030)
- 4.3.2 Global Laser Diode Production Value by Type (2019-2030)
- 4.3.3 Global Laser Diode Production Value Market Share by Type (2019-2030)

## **5 LASER DIODE MARKET BY APPLICATION**

- 5.1 Laser Diode Application Introduction
  - 5.1.1 Optical Storage & Display
  - 5.1.2 Telecom & Communication
  - 5.1.3 Industrial Applications
  - 5.1.4 Medical Application
  - 5.1.5 Other
- 5.2 Global Laser Diode Production by Application
- 5.2.1 Global Laser Diode Production by Application (2019 VS 2023 VS 2030)
- 5.2.2 Global Laser Diode Production by Application (2019-2030)
- 5.2.3 Global Laser Diode Production Market Share by Application (2019-2030)

5.3 Global Laser Diode Production Value by Application

- 5.3.1 Global Laser Diode Production Value by Application (2019 VS 2023 VS 2030)
- 5.3.2 Global Laser Diode Production Value by Application (2019-2030)
- 5.3.3 Global Laser Diode Production Value Market Share by Application (2019-2030)

## 6 COMPANY PROFILES

- 6.1 Sony
  - 6.1.1 Sony Comapny Information
  - 6.1.2 Sony Business Overview
  - 6.1.3 Sony Laser Diode Production, Value and Gross Margin (2019-2024)
  - 6.1.4 Sony Laser Diode Product Portfolio
  - 6.1.5 Sony Recent Developments
- 6.2 Nichia
  - 6.2.1 Nichia Comapny Information



- 6.2.2 Nichia Business Overview
- 6.2.3 Nichia Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.2.4 Nichia Laser Diode Product Portfolio
- 6.2.5 Nichia Recent Developments
- 6.3 Sharp
  - 6.3.1 Sharp Comapny Information
  - 6.3.2 Sharp Business Overview
  - 6.3.3 Sharp Laser Diode Production, Value and Gross Margin (2019-2024)
  - 6.3.4 Sharp Laser Diode Product Portfolio
  - 6.3.5 Sharp Recent Developments
- 6.4 Ushio
  - 6.4.1 Ushio Comapny Information
- 6.4.2 Ushio Business Overview
- 6.4.3 Ushio Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.4.4 Ushio Laser Diode Product Portfolio
- 6.4.5 Ushio Recent Developments

6.5 Osram

- 6.5.1 Osram Comapny Information
- 6.5.2 Osram Business Overview
- 6.5.3 Osram Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.5.4 Osram Laser Diode Product Portfolio
- 6.5.5 Osram Recent Developments

6.6 TOPTICA Photonics

- 6.6.1 TOPTICA Photonics Comapny Information
- 6.6.2 TOPTICA Photonics Business Overview
- 6.6.3 TOPTICA Photonics Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.6.4 TOPTICA Photonics Laser Diode Product Portfolio
- 6.6.5 TOPTICA Photonics Recent Developments
- 6.7 Egismos Technology
- 6.7.1 Egismos Technology Comapny Information
- 6.7.2 Egismos Technology Business Overview
- 6.7.3 Egismos Technology Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.7.4 Egismos Technology Laser Diode Product Portfolio
- 6.7.5 Egismos Technology Recent Developments

6.8 Arima Lasers

- 6.8.1 Arima Lasers Comapny Information
- 6.8.2 Arima Lasers Business Overview



- 6.8.3 Arima Lasers Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.8.4 Arima Lasers Laser Diode Product Portfolio
- 6.8.5 Arima Lasers Recent Developments

6.9 Ondax

- 6.9.1 Ondax Comapny Information
- 6.9.2 Ondax Business Overview
- 6.9.3 Ondax Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.9.4 Ondax Laser Diode Product Portfolio
- 6.9.5 Ondax Recent Developments
- 6.10 Panasonic
  - 6.10.1 Panasonic Comapny Information
  - 6.10.2 Panasonic Business Overview
  - 6.10.3 Panasonic Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.10.4 Panasonic Laser Diode Product Portfolio
- 6.10.5 Panasonic Recent Developments

6.11 ROHM

- 6.11.1 ROHM Comapny Information
- 6.11.2 ROHM Business Overview
- 6.11.3 ROHM Laser Diode Production, Value and Gross Margin (2019-2024)
- 6.11.4 ROHM Laser Diode Product Portfolio
- 6.11.5 ROHM Recent Developments
- 6.12 Hamamatsu
  - 6.12.1 Hamamatsu Comapny Information
  - 6.12.2 Hamamatsu Business Overview
  - 6.12.3 Hamamatsu Laser Diode Production, Value and Gross Margin (2019-2024)
  - 6.12.4 Hamamatsu Laser Diode Product Portfolio
  - 6.12.5 Hamamatsu Recent Developments
- 6.13 Newport Corp
  - 6.13.1 Newport Corp Comapny Information
  - 6.13.2 Newport Corp Business Overview
  - 6.13.3 Newport Corp Laser Diode Production, Value and Gross Margin (2019-2024)
  - 6.13.4 Newport Corp Laser Diode Product Portfolio
  - 6.13.5 Newport Corp Recent Developments
- 6.14 Finisar
  - 6.14.1 Finisar Comapny Information
  - 6.14.2 Finisar Business Overview
  - 6.14.3 Finisar Laser Diode Production, Value and Gross Margin (2019-2024)
  - 6.14.4 Finisar Laser Diode Product Portfolio
  - 6.14.5 Finisar Recent Developments



6.15 Mitsubishi Electric

6.15.1 Mitsubishi Electric Comapny Information

6.15.2 Mitsubishi Electric Business Overview

6.15.3 Mitsubishi Electric Laser Diode Production, Value and Gross Margin

(2019-2024)

6.15.4 Mitsubishi Electric Laser Diode Product Portfolio

6.15.5 Mitsubishi Electric Recent Developments

6.16 Huaguang Photoelectric

6.16.1 Huaguang Photoelectric Comapny Information

6.16.2 Huaguang Photoelectric Business Overview

6.16.3 Huaguang Photoelectric Laser Diode Production, Value and Gross Margin (2019-2024)

6.16.4 Huaguang Photoelectric Laser Diode Product Portfolio

6.16.5 Huaguang Photoelectric Recent Developments

6.17 QSI

- 6.17.1 QSI Comapny Information
- 6.17.2 QSI Business Overview

6.17.3 QSI Laser Diode Production, Value and Gross Margin (2019-2024)

6.17.4 QSI Laser Diode Product Portfolio

6.17.5 QSI Recent Developments

## 7 GLOBAL LASER DIODE PRODUCTION BY REGION

7.1 Global Laser Diode Production by Region: 2019 VS 2023 VS 2030

7.2 Global Laser Diode Production by Region (2019-2030)

7.2.1 Global Laser Diode Production by Region: 2019-2024

7.2.2 Global Laser Diode Production by Region (2025-2030)

7.3 Global Laser Diode Production by Region: 2019 VS 2023 VS 2030

7.4 Global Laser Diode Production Value by Region (2019-2030)

7.4.1 Global Laser Diode Production Value by Region: 2019-2024

7.4.2 Global Laser Diode Production Value by Region (2025-2030)

7.5 Global Laser Diode Market Price Analysis by Region (2019-2024)

7.6 Regional Production Value Trends (2019-2030)

7.6.1 North America Laser Diode Production Value (2019-2030)

7.6.2 Europe Laser Diode Production Value (2019-2030)

7.6.3 Asia-Pacific Laser Diode Production Value (2019-2030)

7.6.4 Latin America Laser Diode Production Value (2019-2030)

7.6.5 Middle East & Africa Laser Diode Production Value (2019-2030)



#### **8 GLOBAL LASER DIODE CONSUMPTION BY REGION**

8.1 Global Laser Diode Consumption by Region: 2019 VS 2023 VS 2030 8.2 Global Laser Diode Consumption by Region (2019-2030) 8.2.1 Global Laser Diode Consumption by Region (2019-2024) 8.2.2 Global Laser Diode Consumption by Region (2025-2030) 8.3 North America 8.3.1 North America Laser Diode Consumption Growth Rate by Country: 2019 VS 2023 VS 2030 8.3.2 North America Laser Diode Consumption by Country (2019-2030) 8.3.3 U.S. 8.3.4 Canada 8.4 Europe 8.4.1 Europe Laser Diode Consumption Growth Rate by Country: 2019 VS 2023 VS 2030 8.4.2 Europe Laser Diode Consumption by Country (2019-2030) 8.4.3 Germany 8.4.4 France 8.4.5 U.K. 8.4.6 Italy 8.4.7 Netherlands 8.5 Asia Pacific 8.5.1 Asia Pacific Laser Diode Consumption Growth Rate by Country: 2019 VS 2023 VS 2030 8.5.2 Asia Pacific Laser Diode Consumption by Country (2019-2030) 8.5.3 China 8.5.4 Japan 8.5.5 South Korea 8.5.6 Southeast Asia 8.5.7 India 8.5.8 Australia

8.6 LAMEA

8.6.1 LAMEA Laser Diode Consumption Growth Rate by Country: 2019 VS 2023 VS 2030

8.6.2 LAMEA Laser Diode Consumption by Country (2019-2030)

- 8.6.3 Mexico
- 8.6.4 Brazil
- 8.6.5 Turkey
- 8.6.6 GCC Countries



#### 9 VALUE CHAIN AND SALES CHANNELS ANALYSIS

- 9.1 Laser Diode Value Chain Analysis
  - 9.1.1 Laser Diode Key Raw Materials
  - 9.1.2 Raw Materials Key Suppliers
  - 9.1.3 Manufacturing Cost Structure
  - 9.1.4 Laser Diode Production Mode & Process
- 9.2 Laser Diode Sales Channels Analysis
  - 9.2.1 Direct Comparison with Distribution Share
  - 9.2.2 Laser Diode Distributors
  - 9.2.3 Laser Diode Customers

#### **10 CONCLUDING INSIGHTS**

#### **11 APPENDIX**

- 11.1 Reasons for Doing This Study
- 11.2 Research Methodology
- 11.3 Research Process
- 11.4 Authors List of This Report
- 11.5 Data Source
- 11.5.1 Secondary Sources
- 11.5.2 Primary Sources
- 11.6 Disclaimer



#### I would like to order

Product name: Global Laser Diode Market by Size, by Type, by Application, by Region, History and Forecast 2019-2030

Product link: https://marketpublishers.com/r/GEC39182B738EN.html

Price: US\$ 3,950.00 (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 <u>https://marketpublishers.com/r/GEC39182B738EN.html</u>

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

Custumer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>

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



Global Laser Diode Market by Size, by Type, by Application, by Region, History and Forecast 2019-2030