

Solid-State Laser Market by Type (Continuous Wave Lasers, Pulsed Solid State Lasers), Application (Aerospace and Defense, Automotive, Healthcare, and Others), and Region 2024-2032

<https://marketpublishers.com/r/SBA8F3454BA4EN.html>

Date: April 2024

Pages: 135

Price: US\$ 3,899.00 (Single User License)

ID: SBA8F3454BA4EN

Abstracts

The global solid-state laser market size reached US\$ 2.3 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 4.4 Billion by 2032, exhibiting a growth rate (CAGR) of 7.16% during 2024-2032. The increasing demand for pulsed lasers and the extensive product usage in the field of dentistry, surgical procedures, and diverse skin rejuvenation therapies represent some of the key factors driving the market.

Solid-state laser (SSL) represents a class of active laser that is created on various solid-state-gain mediums, such as crystalline and glass materials doped with rare and transition metal ions. It relies on garnets, aluminates, metal oxides, fluorides, tungstate, and molybdates as standard crystalline materials that act as a good host for producing laser light. SSL comprises optics and electronic items, including internal controls and power supply solutions, as two major components that are integrated into one box for product formation. As compared to gas laser light, SSL provides superior laser output per unit volume even while using a small resonator. Apart from this, it is economical and offers high beam quality, amplitude stability, better peak power, unparalleled efficiency, reduced chance of material in active medium going waste, and nearly diffraction-limited beam divergence. Consequently, SSL finds extensive applications in endoscopy, target destination systems, metal drilling, and environmental instrumentation measurements.

The widespread adoption of SSL across the healthcare sector can be attributed to the increasing demand for pulsed lasers and the extensive product usage in the field of dentistry, surgical procedures, and diverse skin rejuvenation therapies. This represents

one of the key factors driving the market growth. Such laser solutions are further utilized in melasma treatment, scar removal, and eye surgeries owing to their multiple benefits, such as enhanced convenience, reduced non-contact lens risks, and permanently improved vision. Moreover, the significant expansion in the automotive and aerospace industries and the escalating need for welding technologies have encouraged manufacturers to employ a solid-state laser to join multiple metal pieces through a beam, which is acting as another growth-inducing factor. In line with this, the extensive product utilization in destructive laser weapon systems for disabling rivals' security systems and immobilizing the target is propelling the market growth. Furthermore, the growing SSL incorporation in red-green-blue (RGB) light sources in laser printers or projectors, optical transmission systems, and nuclear-fusion applications are supporting the market growth. Other factors, such as the escalating SSL demand in material handling operations, including etching, checking, drilling, and cutting, and ongoing research and development (R&D) activities to enhance product efficacy, are creating a positive outlook for the market across the globe.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each segment of the global solid-state laser market, along with forecasts at the global, regional, and country level from 2024-2032. Our report has categorized the market based on type and application.

Type Insights

Continuous Wave Lasers
Pulsed Solid State Lasers

The report has also provided a detailed breakup and analysis of the solid-state laser market based on the type. This includes continuous wave and pulsed solid state lasers. According to the report, continuous wave laser represented the largest segment.

Application Insights

Aerospace and Defense
Automotive
Healthcare
Others

A detailed breakup and analysis of the solid-state laser market based on the application has also been provided in the report. This includes aerospace and defense, automotive,

healthcare and others. According to the report, healthcare accounted for the largest market share.

Regional Insights

North America

United States

Canada

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

The report has also provided a comprehensive analysis of all the major regional markets that include North America (the United States and Canada); Europe (Germany, France, the United Kingdom, Italy, Spain, Russia, and others); Asia Pacific (China, Japan, India, South Korea, Australia, Indonesia, and others); Latin America (Brazil, Mexico, and others); and Middle East and Africa.

According to the report, the Asia Pacific was the largest market for solid-state laser. Some of the factors driving the Asia Pacific solid-state laser market included its increasing need for pulsed lasers and rising product usage in surgical procedures and

skin rejuvenation therapies.

Competitive Landscape

The report has also provided a comprehensive analysis of the competitive landscape in the global solid-state laser market. Detailed profiles of all major companies have also been provided. Some of the companies covered include Coherent Inc., CrystaLaser, Han'S Laser Technology Industry Group Co. Ltd., InnoLas, Jenoptik AG, Laserglow Technologies, Photonics Industries International Inc., Tianjin Maiman Laser Technology Co. Ltd, Trumpf, Wuhan Huaray Precision Laser Co. Ltd etc. Kindly, note that this only represents a partial list of companies, and the complete list has been provided in the report.

Key Questions Answered in This Report:

How has the global solid-state laser market performed so far and how will it perform in the coming years?

What are the drivers, restraints, and opportunities in the global solid-state laser market?

What are the key regional markets?

Which countries represent the most attractive solid-state laser markets?

What is the breakup of the market based on the type?

What is the breakup of the market based on the application?

What is the competitive structure of the global solid-state laser market?

Who are the key players/companies in the global solid-state laser market?

Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL SOLID-STATE LASER MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

6 MARKET BREAKUP BY TYPE

- 6.1 Continuous Wave Lasers
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Pulsed Solid State Lasers
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast

7 MARKET BREAKUP BY APPLICATION

7.1 Aerospace and Defense

7.1.1 Market Trends

7.1.2 Market Forecast

7.2 Automotive

7.2.1 Market Trends

7.2.2 Market Forecast

7.3 Healthcare

7.3.1 Market Trends

7.3.2 Market Forecast

7.4 Others

7.4.1 Market Trends

7.4.2 Market Forecast

8 MARKET BREAKUP BY REGION

8.1 North America

8.1.1 United States

8.1.1.1 Market Trends

8.1.1.2 Market Forecast

8.1.2 Canada

8.1.2.1 Market Trends

8.1.2.2 Market Forecast

8.2 Asia-Pacific

8.2.1 China

8.2.1.1 Market Trends

8.2.1.2 Market Forecast

8.2.2 Japan

8.2.2.1 Market Trends

8.2.2.2 Market Forecast

8.2.3 India

8.2.3.1 Market Trends

8.2.3.2 Market Forecast

8.2.4 South Korea

8.2.4.1 Market Trends

8.2.4.2 Market Forecast

8.2.5 Australia

8.2.5.1 Market Trends

- 8.2.5.2 Market Forecast
- 8.2.6 Indonesia
 - 8.2.6.1 Market Trends
 - 8.2.6.2 Market Forecast
- 8.2.7 Others
 - 8.2.7.1 Market Trends
 - 8.2.7.2 Market Forecast
- 8.3 Europe
 - 8.3.1 Germany
 - 8.3.1.1 Market Trends
 - 8.3.1.2 Market Forecast
 - 8.3.2 France
 - 8.3.2.1 Market Trends
 - 8.3.2.2 Market Forecast
 - 8.3.3 United Kingdom
 - 8.3.3.1 Market Trends
 - 8.3.3.2 Market Forecast
 - 8.3.4 Italy
 - 8.3.4.1 Market Trends
 - 8.3.4.2 Market Forecast
 - 8.3.5 Spain
 - 8.3.5.1 Market Trends
 - 8.3.5.2 Market Forecast
 - 8.3.6 Russia
 - 8.3.6.1 Market Trends
 - 8.3.6.2 Market Forecast
 - 8.3.7 Others
 - 8.3.7.1 Market Trends
 - 8.3.7.2 Market Forecast
- 8.4 Latin America
 - 8.4.1 Brazil
 - 8.4.1.1 Market Trends
 - 8.4.1.2 Market Forecast
 - 8.4.2 Mexico
 - 8.4.2.1 Market Trends
 - 8.4.2.2 Market Forecast
 - 8.4.3 Others
 - 8.4.3.1 Market Trends
 - 8.4.3.2 Market Forecast

8.5 Middle East and Africa

8.5.1 Market Trends

8.5.2 Market Breakup by Country

8.5.3 Market Forecast

9 DRIVERS, RESTRAINTS, AND OPPORTUNITIES

9.1 Overview

9.2 Drivers

9.3 Restraints

9.4 Opportunities

10 VALUE CHAIN ANALYSIS

11 PORTERS FIVE FORCES ANALYSIS

11.1 Overview

11.2 Bargaining Power of Buyers

11.3 Bargaining Power of Suppliers

11.4 Degree of Competition

11.5 Threat of New Entrants

11.6 Threat of Substitutes

12 PRICE ANALYSIS

13 COMPETITIVE LANDSCAPE

13.1 Market Structure

13.2 Key Players

13.3 Profiles of Key Players

13.3.1 Coherent Inc.

13.3.1.1 Company Overview

13.3.1.2 Product Portfolio

13.3.1.3 SWOT Analysis

13.3.2 CrystaLaser

13.3.2.1 Company Overview

13.3.2.2 Product Portfolio

13.3.3 Han'S Laser Technology Industry Group Co. Ltd.

13.3.3.1 Company Overview

13.3.3.2 Product Portfolio

13.3.3.3 Financials

13.3.4 InnoLas

13.3.4.1 Company Overview

13.3.4.2 Product Portfolio

13.3.5 Jenoptik AG

13.3.5.1 Company Overview

13.3.5.2 Product Portfolio

13.3.5.3 Financials

13.3.6 Laserglow Technologies

13.3.6.1 Company Overview

13.3.6.2 Product Portfolio

13.3.7 Photonics Industries International Inc.

13.3.7.1 Company Overview

13.3.7.2 Product Portfolio

13.3.8 Tianjin Maiman Laser Technology Co. Ltd

13.3.8.1 Company Overview

13.3.8.2 Product Portfolio

13.3.9 Trumpf

13.3.9.1 Company Overview

13.3.9.2 Product Portfolio

13.3.10 Wuhan Huaray Precision Laser Co. Ltd

13.3.10.1 Company Overview

13.3.10.2 Product Portfolio

Kindly, note that this only represents a partial list of companies, and the complete list has been provided in the report

List Of Tables

LIST OF TABLES

Table 1: Global: Solid-State Laser Market: Key Industry Highlights, 2023 and 2032

Table 2: Global: Solid-State Laser Market Forecast: Breakup by Type (in Million US\$), 2024-2032

Table 3: Global: Solid-State Laser Market Forecast: Breakup by Application (in Million US\$), 2024-2032

Table 4: Global: Solid-State Laser Market Forecast: Breakup by Region (in Million US\$), 2024-2032

Table 5: Global: Solid-State Laser Market: Competitive Structure

Table 6: Global: Solid-State Laser Market: Key Players

List Of Figures

LIST OF FIGURES

Figure 1: Global: Solid-State Laser Market: Major Drivers and Challenges

Figure 2: Global: Solid-State Laser Market: Sales Value (in Billion US\$), 2018-2023

Figure 3: Global: Solid-State Laser Market Forecast: Sales Value (in Billion US\$), 2024-2032

Figure 4: Global: Solid-State Laser Market: Breakup by Type (in %), 2023

Figure 5: Global: Solid-State Laser Market: Breakup by Application (in %), 2023

Figure 6: Global: Solid-State Laser Market: Breakup by Region (in %), 2023

Figure 7: Global: Solid-State Laser (Continuous Wave Lasers) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 8: Global: Solid-State Laser (Continuous Wave Lasers) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 9: Global: Solid-State Laser (Pulsed Solid State Lasers) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 10: Global: Solid-State Laser (Pulsed Solid State Lasers) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 11: Global: Solid-State Laser (Aerospace and Defense) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 12: Global: Solid-State Laser (Aerospace and Defense) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 13: Global: Solid-State Laser (Automotive) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 14: Global: Solid-State Laser (Automotive) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 15: Global: Solid-State Laser (Healthcare) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 16: Global: Solid-State Laser (Healthcare) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 17: Global: Solid-State Laser (Others) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 18: Global: Solid-State Laser (Others) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 19: North America: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 20: North America: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 21: United States: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 22: United States: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 23: Canada: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 24: Canada: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 25: Asia-Pacific: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 26: Asia-Pacific: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 27: China: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 28: China: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 29: Japan: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 30: Japan: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 31: India: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 32: India: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 33: South Korea: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 34: South Korea: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 35: Australia: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 36: Australia: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 37: Indonesia: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 38: Indonesia: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 39: Others: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 40: Others: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 41: Europe: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 42: Europe: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 43: Germany: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 44: Germany: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 45: France: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 46: France: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 47: United Kingdom: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 48: United Kingdom: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 49: Italy: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 50: Italy: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 51: Spain: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 52: Spain: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 53: Russia: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 54: Russia: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 55: Others: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 56: Others: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 57: Latin America: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 58: Latin America: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 59: Brazil: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 60: Brazil: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 61: Mexico: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 62: Mexico: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 63: Others: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 64: Others: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 65: Middle East and Africa: Solid-State Laser Market: Sales Value (in Million US\$), 2018 & 2023

Figure 66: Middle East and Africa: Solid-State Laser Market: Breakup by Country (in %),

2023

Figure 67: Middle East and Africa: Solid-State Laser Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 68: Global: Solid-State Laser Industry: Drivers, Restraints, and Opportunities

Figure 69: Global: Solid-State Laser Industry: Value Chain Analysis

Figure 70: Global: Solid-State Laser Industry: Porter's Five Forces Analysis

I would like to order

Product name: Solid-State Laser Market by Type (Continuous Wave Lasers, Pulsed Solid State Lasers), Application (Aerospace and Defense, Automotive, Healthcare, and Others), and Region 2024-2032

Product link: <https://marketpublishers.com/r/SBA8F3454BA4EN.html>

Price: US\$ 3,899.00 (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/SBA8F3454BA4EN.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