

Global Single-Mode VCSEL Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

<https://marketpublishers.com/r/G734A215D372EN.html>

Date: January 2024

Pages: 102

Price: US\$ 3,480.00 (Single User License)

ID: G734A215D372EN

Abstracts

According to our (Global Info Research) latest study, the global Single-Mode VCSEL market size was valued at USD 746.8 million in 2023 and is forecast to a readjusted size of USD 1735.8 million by 2030 with a CAGR of 12.8% during review period.

A VCSEL (Vertical-Cavity Surface-Emitting Laser) is a type of semiconductor laser that emits light vertically from the surface of a chip. A single-mode VCSEL is a VCSEL that emits light in a single transverse mode, which means that the laser beam has a well-defined mode profile and low divergence.

Single-mode VCSEL are commonly used in optical communication systems, such as fiber optic networks and data centers, where high-speed and high-bandwidth communication is required. They are also used in sensing applications, such as distance measurements, and in medical equipment, such as endoscopes.

Single-mode VCSEL have several advantages over other types of lasers. They have a narrow linewidth, which means that they can transmit data over long distances without distortion. They also have a high modulation bandwidth, which allows them to transmit data at high speeds. Additionally, they are small, efficient, and can be fabricated using standard semiconductor manufacturing techniques, which makes them cost-effective.

Coherent (II-VI) is the world's largest manufacturers of the Single-Mode VCSEL with a market share of about 35%. Other major manufacturers include TRUMPF, Lumentum, etc. The Asia-Pacific region is the world's largest market for Single-Mode VCSEL, has a share about 40%, followed by North America and Europe, with share 29% and 28%, separately. In terms of product types, Gallium Arsenide (GaAs) is the largest market

segment, occupying for a share of over 70%. In terms of product applications, Single-Mode VCSEL is mainly used in Data Center, with a market share of 36%, followed by Commercial & Industrial and Consumer Electronics.

The Global Info Research report includes an overview of the development of the Single-Mode VCSEL industry chain, the market status of Consumer Electronics (Gallium Arsenide (GaAs), Indium Phosphide (InP)), Data Center (Gallium Arsenide (GaAs), Indium Phosphide (InP)), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Single-Mode VCSEL.

Regionally, the report analyzes the Single-Mode VCSEL markets in key regions. North America and Europe are experiencing steady growth, driven by government initiatives and increasing consumer awareness. Asia-Pacific, particularly China, leads the global Single-Mode VCSEL market, with robust domestic demand, supportive policies, and a strong manufacturing base.

Key Features:

The report presents comprehensive understanding of the Single-Mode VCSEL market. It provides a holistic view of the industry, as well as detailed insights into individual components and stakeholders. The report analysis market dynamics, trends, challenges, and opportunities within the Single-Mode VCSEL industry.

The report involves analyzing the market at a macro level:

Market Sizing and Segmentation: Report collect data on the overall market size, including the sales quantity (Million Units), revenue generated, and market share of different by Type (e.g., Gallium Arsenide (GaAs), Indium Phosphide (InP)).

Industry Analysis: Report analyse the broader industry trends, such as government policies and regulations, technological advancements, consumer preferences, and market dynamics. This analysis helps in understanding the key drivers and challenges influencing the Single-Mode VCSEL market.

Regional Analysis: The report involves examining the Single-Mode VCSEL market at a regional or national level. Report analyses regional factors such as government incentives, infrastructure development, economic conditions, and consumer behaviour to identify variations and opportunities within different markets.

Market Projections: Report covers the gathered data and analysis to make future projections and forecasts for the Single-Mode VCSEL market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to Single-Mode VCSEL:

Company Analysis: Report covers individual Single-Mode VCSEL manufacturers, suppliers, and other relevant industry players. This analysis includes studying their financial performance, market positioning, product portfolios, partnerships, and strategies.

Consumer Analysis: Report covers data on consumer behaviour, preferences, and attitudes towards Single-Mode VCSEL. This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Consumer Electronics, Data Center).

Technology Analysis: Report covers specific technologies relevant to Single-Mode VCSEL. It assesses the current state, advancements, and potential future developments in Single-Mode VCSEL areas.

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report presents insights into the competitive landscape of the Single-Mode VCSEL market. This analysis helps understand market share, competitive advantages, and potential areas for differentiation among industry players.

Market Validation: The report involves validating findings and projections through primary research, such as surveys, interviews, and focus groups.

Market Segmentation

Single-Mode VCSEL market is split by Type and by Application. For the period 2019-2030, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value.

Market segment by Type

Gallium Arsenide (GaAs)

Indium Phosphide (InP)

Others

Market segment by Application

Consumer Electronics

Data Center

Commercial & Industrial

Automotive

Healthcare

Military

Major players covered

Coherent(II-VI)

Lumentum

ams-OSRAM

TRUMPF

Broadcom

Market segment by region, regional analysis covers

North America (United States, Canada and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Single-Mode VCSEL product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Single-Mode VCSEL, with price, sales, revenue and global market share of Single-Mode VCSEL from 2019 to 2024.

Chapter 3, the Single-Mode VCSEL competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Single-Mode VCSEL breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2019 to 2030.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2019 to 2030.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2023. and Single-Mode VCSEL market forecast, by regions, type and application, with sales and revenue, from 2025 to 2030.

Chapter 12, market dynamics, drivers, restraints, trends and Porters Five Forces analysis.

Chapter 13, the key raw materials and key suppliers, and industry chain of Single-Mode VCSEL.

Chapter 14 and 15, to describe Single-Mode VCSEL sales channel, distributors,

customers, research findings and conclusion.

Contents

1 MARKET OVERVIEW

1.1 Product Overview and Scope of Single-Mode VCSEL

1.2 Market Estimation Caveats and Base Year

1.3 Market Analysis by Type

1.3.1 Overview: Global Single-Mode VCSEL Consumption Value by Type: 2019 Versus 2023 Versus 2030

1.3.2 Gallium Arsenide (GaAs)

1.3.3 Indium Phosphide (InP)

1.3.4 Others

1.4 Market Analysis by Application

1.4.1 Overview: Global Single-Mode VCSEL Consumption Value by Application: 2019 Versus 2023 Versus 2030

1.4.2 Consumer Electronics

1.4.3 Data Center

1.4.4 Commercial & Industrial

1.4.5 Automotive

1.4.6 Healthcare

1.4.7 Military

1.5 Global Single-Mode VCSEL Market Size & Forecast

1.5.1 Global Single-Mode VCSEL Consumption Value (2019 & 2023 & 2030)

1.5.2 Global Single-Mode VCSEL Sales Quantity (2019-2030)

1.5.3 Global Single-Mode VCSEL Average Price (2019-2030)

2 MANUFACTURERS PROFILES

2.1 Coherent(II-VI)

2.1.1 Coherent(II-VI) Details

2.1.2 Coherent(II-VI) Major Business

2.1.3 Coherent(II-VI) Single-Mode VCSEL Product and Services

2.1.4 Coherent(II-VI) Single-Mode VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.1.5 Coherent(II-VI) Recent Developments/Updates

2.2 Lumentum

2.2.1 Lumentum Details

2.2.2 Lumentum Major Business

2.2.3 Lumentum Single-Mode VCSEL Product and Services

2.2.4 Lumentum Single-Mode VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.2.5 Lumentum Recent Developments/Updates

2.3 ams-OSRAM

2.3.1 ams-OSRAM Details

2.3.2 ams-OSRAM Major Business

2.3.3 ams-OSRAM Single-Mode VCSEL Product and Services

2.3.4 ams-OSRAM Single-Mode VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.3.5 ams-OSRAM Recent Developments/Updates

2.4 TRUMPF

2.4.1 TRUMPF Details

2.4.2 TRUMPF Major Business

2.4.3 TRUMPF Single-Mode VCSEL Product and Services

2.4.4 TRUMPF Single-Mode VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.4.5 TRUMPF Recent Developments/Updates

2.5 Broadcom

2.5.1 Broadcom Details

2.5.2 Broadcom Major Business

2.5.3 Broadcom Single-Mode VCSEL Product and Services

2.5.4 Broadcom Single-Mode VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.5.5 Broadcom Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: SINGLE-MODE VCSEL BY MANUFACTURER

3.1 Global Single-Mode VCSEL Sales Quantity by Manufacturer (2019-2024)

3.2 Global Single-Mode VCSEL Revenue by Manufacturer (2019-2024)

3.3 Global Single-Mode VCSEL Average Price by Manufacturer (2019-2024)

3.4 Market Share Analysis (2023)

3.4.1 Producer Shipments of Single-Mode VCSEL by Manufacturer Revenue (\$MM) and Market Share (%): 2023

3.4.2 Top 3 Single-Mode VCSEL Manufacturer Market Share in 2023

3.4.2 Top 6 Single-Mode VCSEL Manufacturer Market Share in 2023

3.5 Single-Mode VCSEL Market: Overall Company Footprint Analysis

3.5.1 Single-Mode VCSEL Market: Region Footprint

3.5.2 Single-Mode VCSEL Market: Company Product Type Footprint

3.5.3 Single-Mode VCSEL Market: Company Product Application Footprint

- 3.6 New Market Entrants and Barriers to Market Entry
- 3.7 Mergers, Acquisition, Agreements, and Collaborations

4 CONSUMPTION ANALYSIS BY REGION

- 4.1 Global Single-Mode VCSEL Market Size by Region
 - 4.1.1 Global Single-Mode VCSEL Sales Quantity by Region (2019-2030)
 - 4.1.2 Global Single-Mode VCSEL Consumption Value by Region (2019-2030)
 - 4.1.3 Global Single-Mode VCSEL Average Price by Region (2019-2030)
- 4.2 North America Single-Mode VCSEL Consumption Value (2019-2030)
- 4.3 Europe Single-Mode VCSEL Consumption Value (2019-2030)
- 4.4 Asia-Pacific Single-Mode VCSEL Consumption Value (2019-2030)
- 4.5 South America Single-Mode VCSEL Consumption Value (2019-2030)
- 4.6 Middle East and Africa Single-Mode VCSEL Consumption Value (2019-2030)

5 MARKET SEGMENT BY TYPE

- 5.1 Global Single-Mode VCSEL Sales Quantity by Type (2019-2030)
- 5.2 Global Single-Mode VCSEL Consumption Value by Type (2019-2030)
- 5.3 Global Single-Mode VCSEL Average Price by Type (2019-2030)

6 MARKET SEGMENT BY APPLICATION

- 6.1 Global Single-Mode VCSEL Sales Quantity by Application (2019-2030)
- 6.2 Global Single-Mode VCSEL Consumption Value by Application (2019-2030)
- 6.3 Global Single-Mode VCSEL Average Price by Application (2019-2030)

7 NORTH AMERICA

- 7.1 North America Single-Mode VCSEL Sales Quantity by Type (2019-2030)
- 7.2 North America Single-Mode VCSEL Sales Quantity by Application (2019-2030)
- 7.3 North America Single-Mode VCSEL Market Size by Country
 - 7.3.1 North America Single-Mode VCSEL Sales Quantity by Country (2019-2030)
 - 7.3.2 North America Single-Mode VCSEL Consumption Value by Country (2019-2030)
 - 7.3.3 United States Market Size and Forecast (2019-2030)
 - 7.3.4 Canada Market Size and Forecast (2019-2030)
 - 7.3.5 Mexico Market Size and Forecast (2019-2030)

8 EUROPE

- 8.1 Europe Single-Mode VCSEL Sales Quantity by Type (2019-2030)
- 8.2 Europe Single-Mode VCSEL Sales Quantity by Application (2019-2030)
- 8.3 Europe Single-Mode VCSEL Market Size by Country
 - 8.3.1 Europe Single-Mode VCSEL Sales Quantity by Country (2019-2030)
 - 8.3.2 Europe Single-Mode VCSEL Consumption Value by Country (2019-2030)
 - 8.3.3 Germany Market Size and Forecast (2019-2030)
 - 8.3.4 France Market Size and Forecast (2019-2030)
 - 8.3.5 United Kingdom Market Size and Forecast (2019-2030)
 - 8.3.6 Russia Market Size and Forecast (2019-2030)
 - 8.3.7 Italy Market Size and Forecast (2019-2030)

9 ASIA-PACIFIC

- 9.1 Asia-Pacific Single-Mode VCSEL Sales Quantity by Type (2019-2030)
- 9.2 Asia-Pacific Single-Mode VCSEL Sales Quantity by Application (2019-2030)
- 9.3 Asia-Pacific Single-Mode VCSEL Market Size by Region
 - 9.3.1 Asia-Pacific Single-Mode VCSEL Sales Quantity by Region (2019-2030)
 - 9.3.2 Asia-Pacific Single-Mode VCSEL Consumption Value by Region (2019-2030)
 - 9.3.3 China Market Size and Forecast (2019-2030)
 - 9.3.4 Japan Market Size and Forecast (2019-2030)
 - 9.3.5 Korea Market Size and Forecast (2019-2030)
 - 9.3.6 India Market Size and Forecast (2019-2030)
 - 9.3.7 Southeast Asia Market Size and Forecast (2019-2030)
 - 9.3.8 Australia Market Size and Forecast (2019-2030)

10 SOUTH AMERICA

- 10.1 South America Single-Mode VCSEL Sales Quantity by Type (2019-2030)
- 10.2 South America Single-Mode VCSEL Sales Quantity by Application (2019-2030)
- 10.3 South America Single-Mode VCSEL Market Size by Country
 - 10.3.1 South America Single-Mode VCSEL Sales Quantity by Country (2019-2030)
 - 10.3.2 South America Single-Mode VCSEL Consumption Value by Country (2019-2030)
 - 10.3.3 Brazil Market Size and Forecast (2019-2030)
 - 10.3.4 Argentina Market Size and Forecast (2019-2030)

11 MIDDLE EAST & AFRICA

- 11.1 Middle East & Africa Single-Mode VCSEL Sales Quantity by Type (2019-2030)
- 11.2 Middle East & Africa Single-Mode VCSEL Sales Quantity by Application (2019-2030)
- 11.3 Middle East & Africa Single-Mode VCSEL Market Size by Country
 - 11.3.1 Middle East & Africa Single-Mode VCSEL Sales Quantity by Country (2019-2030)
 - 11.3.2 Middle East & Africa Single-Mode VCSEL Consumption Value by Country (2019-2030)
 - 11.3.3 Turkey Market Size and Forecast (2019-2030)
 - 11.3.4 Egypt Market Size and Forecast (2019-2030)
 - 11.3.5 Saudi Arabia Market Size and Forecast (2019-2030)
 - 11.3.6 South Africa Market Size and Forecast (2019-2030)

12 MARKET DYNAMICS

- 12.1 Single-Mode VCSEL Market Drivers
- 12.2 Single-Mode VCSEL Market Restraints
- 12.3 Single-Mode VCSEL Trends Analysis
- 12.4 Porters Five Forces Analysis
 - 12.4.1 Threat of New Entrants
 - 12.4.2 Bargaining Power of Suppliers
 - 12.4.3 Bargaining Power of Buyers
 - 12.4.4 Threat of Substitutes
 - 12.4.5 Competitive Rivalry

13 RAW MATERIAL AND INDUSTRY CHAIN

- 13.1 Raw Material of Single-Mode VCSEL and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of Single-Mode VCSEL
- 13.3 Single-Mode VCSEL Production Process
- 13.4 Single-Mode VCSEL Industrial Chain

14 SHIPMENTS BY DISTRIBUTION CHANNEL

- 14.1 Sales Channel
 - 14.1.1 Direct to End-User
 - 14.1.2 Distributors
- 14.2 Single-Mode VCSEL Typical Distributors
- 14.3 Single-Mode VCSEL Typical Customers

15 RESEARCH FINDINGS AND CONCLUSION

16 APPENDIX

16.1 Methodology

16.2 Research Process and Data Source

16.3 Disclaimer

List Of Tables

LIST OF TABLES

- Table 1. Global Single-Mode VCSEL Consumption Value by Type, (USD Million), 2019 & 2023 & 2030
- Table 2. Global Single-Mode VCSEL Consumption Value by Application, (USD Million), 2019 & 2023 & 2030
- Table 3. Coherent(II-VI) Basic Information, Manufacturing Base and Competitors
- Table 4. Coherent(II-VI) Major Business
- Table 5. Coherent(II-VI) Single-Mode VCSEL Product and Services
- Table 6. Coherent(II-VI) Single-Mode VCSEL Sales Quantity (Million Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 7. Coherent(II-VI) Recent Developments/Updates
- Table 8. Lumentum Basic Information, Manufacturing Base and Competitors
- Table 9. Lumentum Major Business
- Table 10. Lumentum Single-Mode VCSEL Product and Services
- Table 11. Lumentum Single-Mode VCSEL Sales Quantity (Million Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 12. Lumentum Recent Developments/Updates
- Table 13. ams-OSRAM Basic Information, Manufacturing Base and Competitors
- Table 14. ams-OSRAM Major Business
- Table 15. ams-OSRAM Single-Mode VCSEL Product and Services
- Table 16. ams-OSRAM Single-Mode VCSEL Sales Quantity (Million Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 17. ams-OSRAM Recent Developments/Updates
- Table 18. TRUMPF Basic Information, Manufacturing Base and Competitors
- Table 19. TRUMPF Major Business
- Table 20. TRUMPF Single-Mode VCSEL Product and Services
- Table 21. TRUMPF Single-Mode VCSEL Sales Quantity (Million Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 22. TRUMPF Recent Developments/Updates
- Table 23. Broadcom Basic Information, Manufacturing Base and Competitors
- Table 24. Broadcom Major Business
- Table 25. Broadcom Single-Mode VCSEL Product and Services
- Table 26. Broadcom Single-Mode VCSEL Sales Quantity (Million Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 27. Broadcom Recent Developments/Updates
- Table 28. Global Single-Mode VCSEL Sales Quantity by Manufacturer (2019-2024) &

(Million Units)

Table 29. Global Single-Mode VCSEL Revenue by Manufacturer (2019-2024) & (USD Million)

Table 30. Global Single-Mode VCSEL Average Price by Manufacturer (2019-2024) & (US\$/Unit)

Table 31. Market Position of Manufacturers in Single-Mode VCSEL, (Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2023

Table 32. Head Office and Single-Mode VCSEL Production Site of Key Manufacturer

Table 33. Single-Mode VCSEL Market: Company Product Type Footprint

Table 34. Single-Mode VCSEL Market: Company Product Application Footprint

Table 35. Single-Mode VCSEL New Market Entrants and Barriers to Market Entry

Table 36. Single-Mode VCSEL Mergers, Acquisition, Agreements, and Collaborations

Table 37. Global Single-Mode VCSEL Sales Quantity by Region (2019-2024) & (Million Units)

Table 38. Global Single-Mode VCSEL Sales Quantity by Region (2025-2030) & (Million Units)

Table 39. Global Single-Mode VCSEL Consumption Value by Region (2019-2024) & (USD Million)

Table 40. Global Single-Mode VCSEL Consumption Value by Region (2025-2030) & (USD Million)

Table 41. Global Single-Mode VCSEL Average Price by Region (2019-2024) & (US\$/Unit)

Table 42. Global Single-Mode VCSEL Average Price by Region (2025-2030) & (US\$/Unit)

Table 43. Global Single-Mode VCSEL Sales Quantity by Type (2019-2024) & (Million Units)

Table 44. Global Single-Mode VCSEL Sales Quantity by Type (2025-2030) & (Million Units)

Table 45. Global Single-Mode VCSEL Consumption Value by Type (2019-2024) & (USD Million)

Table 46. Global Single-Mode VCSEL Consumption Value by Type (2025-2030) & (USD Million)

Table 47. Global Single-Mode VCSEL Average Price by Type (2019-2024) & (US\$/Unit)

Table 48. Global Single-Mode VCSEL Average Price by Type (2025-2030) & (US\$/Unit)

Table 49. Global Single-Mode VCSEL Sales Quantity by Application (2019-2024) & (Million Units)

Table 50. Global Single-Mode VCSEL Sales Quantity by Application (2025-2030) & (Million Units)

Table 51. Global Single-Mode VCSEL Consumption Value by Application (2019-2024) &

(USD Million)

Table 52. Global Single-Mode VCSEL Consumption Value by Application (2025-2030) & (USD Million)

Table 53. Global Single-Mode VCSEL Average Price by Application (2019-2024) & (US\$/Unit)

Table 54. Global Single-Mode VCSEL Average Price by Application (2025-2030) & (US\$/Unit)

Table 55. North America Single-Mode VCSEL Sales Quantity by Type (2019-2024) & (Million Units)

Table 56. North America Single-Mode VCSEL Sales Quantity by Type (2025-2030) & (Million Units)

Table 57. North America Single-Mode VCSEL Sales Quantity by Application (2019-2024) & (Million Units)

Table 58. North America Single-Mode VCSEL Sales Quantity by Application (2025-2030) & (Million Units)

Table 59. North America Single-Mode VCSEL Sales Quantity by Country (2019-2024) & (Million Units)

Table 60. North America Single-Mode VCSEL Sales Quantity by Country (2025-2030) & (Million Units)

Table 61. North America Single-Mode VCSEL Consumption Value by Country (2019-2024) & (USD Million)

Table 62. North America Single-Mode VCSEL Consumption Value by Country (2025-2030) & (USD Million)

Table 63. Europe Single-Mode VCSEL Sales Quantity by Type (2019-2024) & (Million Units)

Table 64. Europe Single-Mode VCSEL Sales Quantity by Type (2025-2030) & (Million Units)

Table 65. Europe Single-Mode VCSEL Sales Quantity by Application (2019-2024) & (Million Units)

Table 66. Europe Single-Mode VCSEL Sales Quantity by Application (2025-2030) & (Million Units)

Table 67. Europe Single-Mode VCSEL Sales Quantity by Country (2019-2024) & (Million Units)

Table 68. Europe Single-Mode VCSEL Sales Quantity by Country (2025-2030) & (Million Units)

Table 69. Europe Single-Mode VCSEL Consumption Value by Country (2019-2024) & (USD Million)

Table 70. Europe Single-Mode VCSEL Consumption Value by Country (2025-2030) & (USD Million)

Table 71. Asia-Pacific Single-Mode VCSEL Sales Quantity by Type (2019-2024) & (Million Units)

Table 72. Asia-Pacific Single-Mode VCSEL Sales Quantity by Type (2025-2030) & (Million Units)

Table 73. Asia-Pacific Single-Mode VCSEL Sales Quantity by Application (2019-2024) & (Million Units)

Table 74. Asia-Pacific Single-Mode VCSEL Sales Quantity by Application (2025-2030) & (Million Units)

Table 75. Asia-Pacific Single-Mode VCSEL Sales Quantity by Region (2019-2024) & (Million Units)

Table 76. Asia-Pacific Single-Mode VCSEL Sales Quantity by Region (2025-2030) & (Million Units)

Table 77. Asia-Pacific Single-Mode VCSEL Consumption Value by Region (2019-2024) & (USD Million)

Table 78. Asia-Pacific Single-Mode VCSEL Consumption Value by Region (2025-2030) & (USD Million)

Table 79. South America Single-Mode VCSEL Sales Quantity by Type (2019-2024) & (Million Units)

Table 80. South America Single-Mode VCSEL Sales Quantity by Type (2025-2030) & (Million Units)

Table 81. South America Single-Mode VCSEL Sales Quantity by Application (2019-2024) & (Million Units)

Table 82. South America Single-Mode VCSEL Sales Quantity by Application (2025-2030) & (Million Units)

Table 83. South America Single-Mode VCSEL Sales Quantity by Country (2019-2024) & (Million Units)

Table 84. South America Single-Mode VCSEL Sales Quantity by Country (2025-2030) & (Million Units)

Table 85. South America Single-Mode VCSEL Consumption Value by Country (2019-2024) & (USD Million)

Table 86. South America Single-Mode VCSEL Consumption Value by Country (2025-2030) & (USD Million)

Table 87. Middle East & Africa Single-Mode VCSEL Sales Quantity by Type (2019-2024) & (Million Units)

Table 88. Middle East & Africa Single-Mode VCSEL Sales Quantity by Type (2025-2030) & (Million Units)

Table 89. Middle East & Africa Single-Mode VCSEL Sales Quantity by Application (2019-2024) & (Million Units)

Table 90. Middle East & Africa Single-Mode VCSEL Sales Quantity by Application

(2025-2030) & (Million Units)

Table 91. Middle East & Africa Single-Mode VCSEL Sales Quantity by Region

(2019-2024) & (Million Units)

Table 92. Middle East & Africa Single-Mode VCSEL Sales Quantity by Region

(2025-2030) & (Million Units)

Table 93. Middle East & Africa Single-Mode VCSEL Consumption Value by Region

(2019-2024) & (USD Million)

Table 94. Middle East & Africa Single-Mode VCSEL Consumption Value by Region

(2025-2030) & (USD Million)

Table 95. Single-Mode VCSEL Raw Material

Table 96. Key Manufacturers of Single-Mode VCSEL Raw Materials

Table 97. Single-Mode VCSEL Typical Distributors

Table 98. Single-Mode VCSEL Typical Customers

List Of Figures

LIST OF FIGURES

Figure 1. Single-Mode VCSEL Picture

Figure 2. Global Single-Mode VCSEL Consumption Value by Type, (USD Million), 2019 & 2023 & 2030

Figure 3. Global Single-Mode VCSEL Consumption Value Market Share by Type in 2023

Figure 4. Gallium Arsenide (GaAs) Examples

Figure 5. Indium Phosphide (InP) Examples

Figure 6. Others Examples

Figure 7. Global Single-Mode VCSEL Consumption Value by Application, (USD Million), 2019 & 2023 & 2030

Figure 8. Global Single-Mode VCSEL Consumption Value Market Share by Application in 2023

Figure 9. Consumer Electronics Examples

Figure 10. Data Center Examples

Figure 11. Commercial & Industrial Examples

Figure 12. Automotive Examples

Figure 13. Healthcare Examples

Figure 14. Military Examples

Figure 15. Global Single-Mode VCSEL Consumption Value, (USD Million): 2019 & 2023 & 2030

Figure 16. Global Single-Mode VCSEL Consumption Value and Forecast (2019-2030) & (USD Million)

Figure 17. Global Single-Mode VCSEL Sales Quantity (2019-2030) & (Million Units)

Figure 18. Global Single-Mode VCSEL Average Price (2019-2030) & (US\$/Unit)

Figure 19. Global Single-Mode VCSEL Sales Quantity Market Share by Manufacturer in 2023

Figure 20. Global Single-Mode VCSEL Consumption Value Market Share by Manufacturer in 2023

Figure 21. Producer Shipments of Single-Mode VCSEL by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2023

Figure 22. Top 3 Single-Mode VCSEL Manufacturer (Consumption Value) Market Share in 2023

Figure 23. Top 6 Single-Mode VCSEL Manufacturer (Consumption Value) Market Share in 2023

Figure 24. Global Single-Mode VCSEL Sales Quantity Market Share by Region

(2019-2030)

Figure 25. Global Single-Mode VCSEL Consumption Value Market Share by Region (2019-2030)

Figure 26. North America Single-Mode VCSEL Consumption Value (2019-2030) & (USD Million)

Figure 27. Europe Single-Mode VCSEL Consumption Value (2019-2030) & (USD Million)

Figure 28. Asia-Pacific Single-Mode VCSEL Consumption Value (2019-2030) & (USD Million)

Figure 29. South America Single-Mode VCSEL Consumption Value (2019-2030) & (USD Million)

Figure 30. Middle East & Africa Single-Mode VCSEL Consumption Value (2019-2030) & (USD Million)

Figure 31. Global Single-Mode VCSEL Sales Quantity Market Share by Type (2019-2030)

Figure 32. Global Single-Mode VCSEL Consumption Value Market Share by Type (2019-2030)

Figure 33. Global Single-Mode VCSEL Average Price by Type (2019-2030) & (US\$/Unit)

Figure 34. Global Single-Mode VCSEL Sales Quantity Market Share by Application (2019-2030)

Figure 35. Global Single-Mode VCSEL Consumption Value Market Share by Application (2019-2030)

Figure 36. Global Single-Mode VCSEL Average Price by Application (2019-2030) & (US\$/Unit)

Figure 37. North America Single-Mode VCSEL Sales Quantity Market Share by Type (2019-2030)

Figure 38. North America Single-Mode VCSEL Sales Quantity Market Share by Application (2019-2030)

Figure 39. North America Single-Mode VCSEL Sales Quantity Market Share by Country (2019-2030)

Figure 40. North America Single-Mode VCSEL Consumption Value Market Share by Country (2019-2030)

Figure 41. United States Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 42. Canada Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 43. Mexico Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 44. Europe Single-Mode VCSEL Sales Quantity Market Share by Type (2019-2030)

Figure 45. Europe Single-Mode VCSEL Sales Quantity Market Share by Application (2019-2030)

Figure 46. Europe Single-Mode VCSEL Sales Quantity Market Share by Country (2019-2030)

Figure 47. Europe Single-Mode VCSEL Consumption Value Market Share by Country (2019-2030)

Figure 48. Germany Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 49. France Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 50. United Kingdom Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 51. Russia Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 52. Italy Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 53. Asia-Pacific Single-Mode VCSEL Sales Quantity Market Share by Type (2019-2030)

Figure 54. Asia-Pacific Single-Mode VCSEL Sales Quantity Market Share by Application (2019-2030)

Figure 55. Asia-Pacific Single-Mode VCSEL Sales Quantity Market Share by Region (2019-2030)

Figure 56. Asia-Pacific Single-Mode VCSEL Consumption Value Market Share by Region (2019-2030)

Figure 57. China Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 58. Japan Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 59. Korea Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 60. India Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 61. Southeast Asia Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 62. Australia Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 63. South America Single-Mode VCSEL Sales Quantity Market Share by Type

(2019-2030)

Figure 64. South America Single-Mode VCSEL Sales Quantity Market Share by Application (2019-2030)

Figure 65. South America Single-Mode VCSEL Sales Quantity Market Share by Country (2019-2030)

Figure 66. South America Single-Mode VCSEL Consumption Value Market Share by Country (2019-2030)

Figure 67. Brazil Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 68. Argentina Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 69. Middle East & Africa Single-Mode VCSEL Sales Quantity Market Share by Type (2019-2030)

Figure 70. Middle East & Africa Single-Mode VCSEL Sales Quantity Market Share by Application (2019-2030)

Figure 71. Middle East & Africa Single-Mode VCSEL Sales Quantity Market Share by Region (2019-2030)

Figure 72. Middle East & Africa Single-Mode VCSEL Consumption Value Market Share by Region (2019-2030)

Figure 73. Turkey Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 74. Egypt Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 75. Saudi Arabia Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 76. South Africa Single-Mode VCSEL Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 77. Single-Mode VCSEL Market Drivers

Figure 78. Single-Mode VCSEL Market Restraints

Figure 79. Single-Mode VCSEL Market Trends

Figure 80. Porters Five Forces Analysis

Figure 81. Manufacturing Cost Structure Analysis of Single-Mode VCSEL in 2023

Figure 82. Manufacturing Process Analysis of Single-Mode VCSEL

Figure 83. Single-Mode VCSEL Industrial Chain

Figure 84. Sales Quantity Channel: Direct to End-User vs Distributors

Figure 85. Direct Channel Pros & Cons

Figure 86. Indirect Channel Pros & Cons

Figure 87. Methodology

Figure 88. Research Process and Data Source

I would like to order

Product name: Global Single-Mode VCSEL Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

Product link: <https://marketpublishers.com/r/G734A215D372EN.html>

Price: US\$ 3,480.00 (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/G734A215D372EN.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

