

# Global Single-mode and Multimode VCSEL Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029

https://marketpublishers.com/r/G0972D0129DBEN.html

Date: November 2023 Pages: 131 Price: US\$ 3,480.00 (Single User License) ID: G0972D0129DBEN

# Abstracts

According to our (Global Info Research) latest study, the global Single-mode and Multimode VCSEL market size was valued at USD million in 2022 and is forecast to a readjusted size of USD million by 2029 with a CAGR of % during review period.

Single-mode and multimode VCSELs are common VCSEL types that differ in output beam characteristics and applications. The single-mode VCSEL refers to a VCSEL that can only emit a single longitudinal mode beam. The single-mode beam has a small spot diameter and high beam quality, and the propagation of the beam is highly directional. The mltimode VCSEL refers to a VCSEL that can emit multiple longitudinal mode beams. Multimode beams have larger spot diameters and lower beam quality. The propagation of the beam presents multiple spot shapes, and there may be phase differences and interference between different modes.

Single-mode and multimode VCSELs differ in optical properties, preparation processes and applications. Choosing the right VCSEL depends on the specific application needs, such as whether a highly directional beam or multiple independent beams is required, as well as the requirements for output power, modulation bandwidth and spectral characteristics.

The Global Info Research report includes an overview of the development of the Singlemode and Multimode VCSEL industry chain, the market status of Optical Communication (760 nm, 780 nm), Optical Storage (760 nm, 780 nm), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Single-mode and Multimode VCSEL.

Global Single-mode and Multimode VCSEL Market 2023 by Manufacturers, Regions, Type and Application, Forecast t...



Regionally, the report analyzes the Single-mode and Multimode 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 and Multimode VCSEL market, with robust domestic demand, supportive policies, and a strong manufacturing base.

Key Features:

The report presents comprehensive understanding of the Single-mode and Multimode 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 and Multimode 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 (Units), revenue generated, and market share of different by Type (e.g., 760 nm, 780 nm).

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 and Multimode VCSEL market.

Regional Analysis: The report involves examining the Single-mode and Multimode 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 and Multimode 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 and Multimode VCSEL:



Company Analysis: Report covers individual Single-mode and Multimode 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 and Multimode VCSEL This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Optical Communication, Optical Storage).

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

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report present insights into the competitive landscape of the Single-mode and Multimode 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 and Multimode VCSEL market is split by Type and by Application. For the period 2018-2029, 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

760 nm 780 nm 850 nm 940 nm



#### Market segment by Application

**Optical Communication** 

**Optical Storage** 

**Optical Sensor** 

Others

Major players covered

Coherent(II-VI)

Lumentum

ams-OSRAM

Trumpf

Broadcom

Leonardo Electronics

**MKS** Instruments

Santec

VERTILAS

Vertilite

Alight Technologies

**WIN Semiconductors** 

Raycan



Qoptronics

FiberLake

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 and Multimode VCSEL product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Single-mode and Multimode VCSEL, with price, sales, revenue and global market share of Single-mode and Multimode VCSEL from 2018 to 2023.

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

Chapter 4, the Single-mode and Multimode VCSEL breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2018 to 2029.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2018 to 2029.



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 2022.and Single-mode and Multimode VCSEL market forecast, by regions, type and application, with sales and revenue, from 2024 to 2029.

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 and Multimode VCSEL.

Chapter 14 and 15, to describe Single-mode and Multimode VCSEL sales channel, distributors, customers, research findings and conclusion.



# Contents

#### **1 MARKET OVERVIEW**

1.1 Product Overview and Scope of Single-mode and Multimode VCSEL

1.2 Market Estimation Caveats and Base Year

1.3 Market Analysis by Type

1.3.1 Overview: Global Single-mode and Multimode VCSEL Consumption Value by Type: 2018 Versus 2022 Versus 2029

- 1.3.2 760 nm
- 1.3.3 780 nm
- 1.3.4 850 nm
- 1.3.5 940 nm
- 1.4 Market Analysis by Application

1.4.1 Overview: Global Single-mode and Multimode VCSEL Consumption Value by Application: 2018 Versus 2022 Versus 2029

- 1.4.2 Optical Communication
- 1.4.3 Optical Storage
- 1.4.4 Optical Sensor
- 1.4.5 Others

1.5 Global Single-mode and Multimode VCSEL Market Size & Forecast

1.5.1 Global Single-mode and Multimode VCSEL Consumption Value (2018 & 2022 & 2029)

1.5.2 Global Single-mode and Multimode VCSEL Sales Quantity (2018-2029)

1.5.3 Global Single-mode and Multimode VCSEL Average Price (2018-2029)

### **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 and Multimode VCSEL Product and Services
- 2.1.4 Coherent(II-VI) Single-mode and Multimode VCSEL Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

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 and Multimode VCSEL Product and Services



2.2.4 Lumentum Single-mode and Multimode VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

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 and Multimode VCSEL Product and Services

2.3.4 ams-OSRAM Single-mode and Multimode VCSEL Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

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 and Multimode VCSEL Product and Services

2.4.4 Trumpf Single-mode and Multimode VCSEL Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

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 and Multimode VCSEL Product and Services
- 2.5.4 Broadcom Single-mode and Multimode VCSEL Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.5.5 Broadcom Recent Developments/Updates

2.6 Leonardo Electronics

- 2.6.1 Leonardo Electronics Details
- 2.6.2 Leonardo Electronics Major Business
- 2.6.3 Leonardo Electronics Single-mode and Multimode VCSEL Product and Services
- 2.6.4 Leonardo Electronics Single-mode and Multimode VCSEL Sales Quantity,

Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.6.5 Leonardo Electronics Recent Developments/Updates

2.7 MKS Instruments

- 2.7.1 MKS Instruments Details
- 2.7.2 MKS Instruments Major Business
- 2.7.3 MKS Instruments Single-mode and Multimode VCSEL Product and Services
- 2.7.4 MKS Instruments Single-mode and Multimode VCSEL Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

2.7.5 MKS Instruments Recent Developments/Updates

2.8 Santec



- 2.8.1 Santec Details
- 2.8.2 Santec Major Business
- 2.8.3 Santec Single-mode and Multimode VCSEL Product and Services
- 2.8.4 Santec Single-mode and Multimode VCSEL Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.8.5 Santec Recent Developments/Updates

2.9 VERTILAS

- 2.9.1 VERTILAS Details
- 2.9.2 VERTILAS Major Business
- 2.9.3 VERTILAS Single-mode and Multimode VCSEL Product and Services
- 2.9.4 VERTILAS Single-mode and Multimode VCSEL Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.9.5 VERTILAS Recent Developments/Updates

2.10 Vertilite

- 2.10.1 Vertilite Details
- 2.10.2 Vertilite Major Business
- 2.10.3 Vertilite Single-mode and Multimode VCSEL Product and Services
- 2.10.4 Vertilite Single-mode and Multimode VCSEL Sales Quantity, Average Price,
- Revenue, Gross Margin and Market Share (2018-2023)
- 2.10.5 Vertilite Recent Developments/Updates
- 2.11 Alight Technologies
  - 2.11.1 Alight Technologies Details
  - 2.11.2 Alight Technologies Major Business
  - 2.11.3 Alight Technologies Single-mode and Multimode VCSEL Product and Services
- 2.11.4 Alight Technologies Single-mode and Multimode VCSEL Sales Quantity,

Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.11.5 Alight Technologies Recent Developments/Updates

2.12 WIN Semiconductors

- 2.12.1 WIN Semiconductors Details
- 2.12.2 WIN Semiconductors Major Business
- 2.12.3 WIN Semiconductors Single-mode and Multimode VCSEL Product and Services
- 2.12.4 WIN Semiconductors Single-mode and Multimode VCSEL Sales Quantity,
- Average Price, Revenue, Gross Margin and Market Share (2018-2023)
  - 2.12.5 WIN Semiconductors Recent Developments/Updates

2.13 Raycan

- 2.13.1 Raycan Details
- 2.13.2 Raycan Major Business
- 2.13.3 Raycan Single-mode and Multimode VCSEL Product and Services



2.13.4 Raycan Single-mode and Multimode VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.13.5 Raycan Recent Developments/Updates

2.14 Qoptronics

2.14.1 Qoptronics Details

2.14.2 Qoptronics Major Business

2.14.3 Qoptronics Single-mode and Multimode VCSEL Product and Services

2.14.4 Qoptronics Single-mode and Multimode VCSEL Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.14.5 Qoptronics Recent Developments/Updates

2.15 FiberLake

2.15.1 FiberLake Details

2.15.2 FiberLake Major Business

2.15.3 FiberLake Single-mode and Multimode VCSEL Product and Services

2.15.4 FiberLake Single-mode and Multimode VCSEL Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2018-2023)

2.15.5 FiberLake Recent Developments/Updates

# 3 COMPETITIVE ENVIRONMENT: SINGLE-MODE AND MULTIMODE VCSEL BY MANUFACTURER

3.1 Global Single-mode and Multimode VCSEL Sales Quantity by Manufacturer (2018-2023)

3.2 Global Single-mode and Multimode VCSEL Revenue by Manufacturer (2018-2023)3.3 Global Single-mode and Multimode VCSEL Average Price by Manufacturer (2018-2023)

3.4 Market Share Analysis (2022)

3.4.1 Producer Shipments of Single-mode and Multimode VCSEL by Manufacturer Revenue (\$MM) and Market Share (%): 2022

3.4.2 Top 3 Single-mode and Multimode VCSEL Manufacturer Market Share in 20223.4.2 Top 6 Single-mode and Multimode VCSEL Manufacturer Market Share in 20223.5 Single-mode and Multimode VCSEL Market: Overall Company Footprint Analysis

3.5.1 Single-mode and Multimode VCSEL Market: Region Footprint

3.5.2 Single-mode and Multimode VCSEL Market: Company Product Type Footprint

3.5.3 Single-mode and Multimode 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 and Multimode VCSEL Market Size by Region

4.1.1 Global Single-mode and Multimode VCSEL Sales Quantity by Region (2018-2029)

4.1.2 Global Single-mode and Multimode VCSEL Consumption Value by Region (2018-2029)

4.1.3 Global Single-mode and Multimode VCSEL Average Price by Region (2018-2029)

4.2 North America Single-mode and Multimode VCSEL Consumption Value (2018-2029)

4.3 Europe Single-mode and Multimode VCSEL Consumption Value (2018-2029)

4.4 Asia-Pacific Single-mode and Multimode VCSEL Consumption Value (2018-2029)

4.5 South America Single-mode and Multimode VCSEL Consumption Value (2018-2029)

4.6 Middle East and Africa Single-mode and Multimode VCSEL Consumption Value (2018-2029)

#### 5 MARKET SEGMENT BY TYPE

5.1 Global Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2029)

5.2 Global Single-mode and Multimode VCSEL Consumption Value by Type (2018-2029)

5.3 Global Single-mode and Multimode VCSEL Average Price by Type (2018-2029)

### **6 MARKET SEGMENT BY APPLICATION**

6.1 Global Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2029)

6.2 Global Single-mode and Multimode VCSEL Consumption Value by Application (2018-2029)

6.3 Global Single-mode and Multimode VCSEL Average Price by Application (2018-2029)

#### **7 NORTH AMERICA**

7.1 North America Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2029)

7.2 North America Single-mode and Multimode VCSEL Sales Quantity by Application

Global Single-mode and Multimode VCSEL Market 2023 by Manufacturers, Regions, Type and Application, Forecast t...



(2018-2029)

7.3 North America Single-mode and Multimode VCSEL Market Size by Country

7.3.1 North America Single-mode and Multimode VCSEL Sales Quantity by Country (2018-2029)

7.3.2 North America Single-mode and Multimode VCSEL Consumption Value by Country (2018-2029)

7.3.3 United States Market Size and Forecast (2018-2029)

7.3.4 Canada Market Size and Forecast (2018-2029)

7.3.5 Mexico Market Size and Forecast (2018-2029)

## 8 EUROPE

8.1 Europe Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2029)

8.2 Europe Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2029)

8.3 Europe Single-mode and Multimode VCSEL Market Size by Country

8.3.1 Europe Single-mode and Multimode VCSEL Sales Quantity by Country (2018-2029)

8.3.2 Europe Single-mode and Multimode VCSEL Consumption Value by Country (2018-2029)

8.3.3 Germany Market Size and Forecast (2018-2029)

8.3.4 France Market Size and Forecast (2018-2029)

8.3.5 United Kingdom Market Size and Forecast (2018-2029)

8.3.6 Russia Market Size and Forecast (2018-2029)

8.3.7 Italy Market Size and Forecast (2018-2029)

### 9 ASIA-PACIFIC

9.1 Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2029)

9.2 Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2029)

9.3 Asia-Pacific Single-mode and Multimode VCSEL Market Size by Region

9.3.1 Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Region (2018-2029)

9.3.2 Asia-Pacific Single-mode and Multimode VCSEL Consumption Value by Region (2018-2029)

9.3.3 China Market Size and Forecast (2018-2029)

9.3.4 Japan Market Size and Forecast (2018-2029)



- 9.3.5 Korea Market Size and Forecast (2018-2029)
- 9.3.6 India Market Size and Forecast (2018-2029)
- 9.3.7 Southeast Asia Market Size and Forecast (2018-2029)
- 9.3.8 Australia Market Size and Forecast (2018-2029)

#### **10 SOUTH AMERICA**

10.1 South America Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2029)

10.2 South America Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2029)

10.3 South America Single-mode and Multimode VCSEL Market Size by Country

10.3.1 South America Single-mode and Multimode VCSEL Sales Quantity by Country (2018-2029)

10.3.2 South America Single-mode and Multimode VCSEL Consumption Value by Country (2018-2029)

10.3.3 Brazil Market Size and Forecast (2018-2029)

10.3.4 Argentina Market Size and Forecast (2018-2029)

### 11 MIDDLE EAST & AFRICA

11.1 Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2029)

11.2 Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2029)

11.3 Middle East & Africa Single-mode and Multimode VCSEL Market Size by Country

11.3.1 Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Country (2018-2029)

11.3.2 Middle East & Africa Single-mode and Multimode VCSEL Consumption Value by Country (2018-2029)

11.3.3 Turkey Market Size and Forecast (2018-2029)

- 11.3.4 Egypt Market Size and Forecast (2018-2029)
- 11.3.5 Saudi Arabia Market Size and Forecast (2018-2029)

11.3.6 South Africa Market Size and Forecast (2018-2029)

### **12 MARKET DYNAMICS**

12.1 Single-mode and Multimode VCSEL Market Drivers

12.2 Single-mode and Multimode VCSEL Market Restraints



- 12.3 Single-mode and Multimode 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 and Multimode VCSEL and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of Single-mode and Multimode VCSEL
- 13.3 Single-mode and Multimode VCSEL Production Process
- 13.4 Single-mode and Multimode 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 and Multimode VCSEL Typical Distributors
- 14.3 Single-mode and Multimode 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 and Multimode VCSEL Consumption Value by Type, (USD Million), 2018 & 2022 & 2029

Table 2. Global Single-mode and Multimode VCSEL Consumption Value by Application, (USD Million), 2018 & 2022 & 2029

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 and Multimode VCSEL Product and Services

Table 6. Coherent(II-VI) Single-mode and Multimode VCSEL Sales Quantity (Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

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 and Multimode VCSEL Product and Services

Table 11. Lumentum Single-mode and Multimode VCSEL Sales Quantity (Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

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 and Multimode VCSEL Product and Services

Table 16. ams-OSRAM Single-mode and Multimode VCSEL Sales Quantity (Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

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 and Multimode VCSEL Product and Services

Table 21. Trumpf Single-mode and Multimode VCSEL Sales Quantity (Units), Average

Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

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 and Multimode VCSEL Product and Services Table 26. Broadcom Single-mode and Multimode VCSEL Sales Quantity (Units),



Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 27. Broadcom Recent Developments/Updates

Table 28. Leonardo Electronics Basic Information, Manufacturing Base and Competitors

Table 29. Leonardo Electronics Major Business

Table 30. Leonardo Electronics Single-mode and Multimode VCSEL Product and Services

Table 31. Leonardo Electronics Single-mode and Multimode VCSEL Sales Quantity (Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

 Table 32. Leonardo Electronics Recent Developments/Updates

Table 33. MKS Instruments Basic Information, Manufacturing Base and CompetitorsTable 34. MKS Instruments Major Business

Table 35. MKS Instruments Single-mode and Multimode VCSEL Product and Services Table 36. MKS Instruments Single-mode and Multimode VCSEL Sales Quantity (Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 37. MKS Instruments Recent Developments/Updates

Table 38. Santec Basic Information, Manufacturing Base and Competitors

Table 39. Santec Major Business

Table 40. Santec Single-mode and Multimode VCSEL Product and Services

Table 41. Santec Single-mode and Multimode VCSEL Sales Quantity (Units), Average

Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 42. Santec Recent Developments/Updates

Table 43. VERTILAS Basic Information, Manufacturing Base and Competitors

Table 44. VERTILAS Major Business

Table 45. VERTILAS Single-mode and Multimode VCSEL Product and Services

Table 46. VERTILAS Single-mode and Multimode VCSEL Sales Quantity (Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 47. VERTILAS Recent Developments/Updates

Table 48. Vertilite Basic Information, Manufacturing Base and Competitors

Table 49. Vertilite Major Business

Table 50. Vertilite Single-mode and Multimode VCSEL Product and Services

Table 51. Vertilite Single-mode and Multimode VCSEL Sales Quantity (Units), Average

Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023) Table 52. Vertilite Recent Developments/Updates

Table 53. Alight Technologies Basic Information, Manufacturing Base and Competitors Table 54. Alight Technologies Major Business



Table 55. Alight Technologies Single-mode and Multimode VCSEL Product and Services

Table 56. Alight Technologies Single-mode and Multimode VCSEL Sales Quantity (Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 57. Alight Technologies Recent Developments/Updates

 Table 58. WIN Semiconductors Basic Information, Manufacturing Base and Competitors

 Table 59. WIN Semiconductors Major Business

Table 60. WIN Semiconductors Single-mode and Multimode VCSEL Product and Services

Table 61. WIN Semiconductors Single-mode and Multimode VCSEL Sales Quantity (Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 62. WIN Semiconductors Recent Developments/Updates

Table 63. Raycan Basic Information, Manufacturing Base and Competitors

Table 64. Raycan Major Business

Table 65. Raycan Single-mode and Multimode VCSEL Product and Services

Table 66. Raycan Single-mode and Multimode VCSEL Sales Quantity (Units), Average

Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 67. Raycan Recent Developments/Updates

 Table 68. Qoptronics Basic Information, Manufacturing Base and Competitors

Table 69. Qoptronics Major Business

Table 70. Qoptronics Single-mode and Multimode VCSEL Product and Services

Table 71. Qoptronics Single-mode and Multimode VCSEL Sales Quantity (Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 72. Qoptronics Recent Developments/Updates

Table 73. FiberLake Basic Information, Manufacturing Base and Competitors

Table 74. FiberLake Major Business

Table 75. FiberLake Single-mode and Multimode VCSEL Product and Services

Table 76. FiberLake Single-mode and Multimode VCSEL Sales Quantity (Units),

Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 77. FiberLake Recent Developments/Updates

Table 78. Global Single-mode and Multimode VCSEL Sales Quantity by Manufacturer (2018-2023) & (Units)

Table 79. Global Single-mode and Multimode VCSEL Revenue by Manufacturer (2018-2023) & (USD Million)

Table 80. Global Single-mode and Multimode VCSEL Average Price by Manufacturer



#### (2018-2023) & (US\$/Unit)

Table 81. Market Position of Manufacturers in Single-mode and Multimode VCSEL,

(Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2022

Table 82. Head Office and Single-mode and Multimode VCSEL Production Site of Key Manufacturer

Table 83. Single-mode and Multimode VCSEL Market: Company Product Type Footprint

Table 84. Single-mode and Multimode VCSEL Market: Company Product Application Footprint

Table 85. Single-mode and Multimode VCSEL New Market Entrants and Barriers to Market Entry

Table 86. Single-mode and Multimode VCSEL Mergers, Acquisition, Agreements, and Collaborations

Table 87. Global Single-mode and Multimode VCSEL Sales Quantity by Region (2018-2023) & (Units)

Table 88. Global Single-mode and Multimode VCSEL Sales Quantity by Region (2024-2029) & (Units)

Table 89. Global Single-mode and Multimode VCSEL Consumption Value by Region (2018-2023) & (USD Million)

Table 90. Global Single-mode and Multimode VCSEL Consumption Value by Region (2024-2029) & (USD Million)

Table 91. Global Single-mode and Multimode VCSEL Average Price by Region (2018-2023) & (US\$/Unit)

Table 92. Global Single-mode and Multimode VCSEL Average Price by Region (2024-2029) & (US\$/Unit)

Table 93. Global Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2023) & (Units)

Table 94. Global Single-mode and Multimode VCSEL Sales Quantity by Type (2024-2029) & (Units)

Table 95. Global Single-mode and Multimode VCSEL Consumption Value by Type (2018-2023) & (USD Million)

Table 96. Global Single-mode and Multimode VCSEL Consumption Value by Type (2024-2029) & (USD Million)

Table 97. Global Single-mode and Multimode VCSEL Average Price by Type (2018-2023) & (US\$/Unit)

Table 98. Global Single-mode and Multimode VCSEL Average Price by Type (2024-2029) & (US\$/Unit)

Table 99. Global Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2023) & (Units)



Table 100. Global Single-mode and Multimode VCSEL Sales Quantity by Application (2024-2029) & (Units)

Table 101. Global Single-mode and Multimode VCSEL Consumption Value by Application (2018-2023) & (USD Million)

Table 102. Global Single-mode and Multimode VCSEL Consumption Value by Application (2024-2029) & (USD Million)

Table 103. Global Single-mode and Multimode VCSEL Average Price by Application (2018-2023) & (US\$/Unit)

Table 104. Global Single-mode and Multimode VCSEL Average Price by Application (2024-2029) & (US\$/Unit)

Table 105. North America Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2023) & (Units)

Table 106. North America Single-mode and Multimode VCSEL Sales Quantity by Type (2024-2029) & (Units)

Table 107. North America Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2023) & (Units)

Table 108. North America Single-mode and Multimode VCSEL Sales Quantity by Application (2024-2029) & (Units)

Table 109. North America Single-mode and Multimode VCSEL Sales Quantity by Country (2018-2023) & (Units)

Table 110. North America Single-mode and Multimode VCSEL Sales Quantity by Country (2024-2029) & (Units)

Table 111. North America Single-mode and Multimode VCSEL Consumption Value by Country (2018-2023) & (USD Million)

Table 112. North America Single-mode and Multimode VCSEL Consumption Value by Country (2024-2029) & (USD Million)

Table 113. Europe Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2023) & (Units)

Table 114. Europe Single-mode and Multimode VCSEL Sales Quantity by Type (2024-2029) & (Units)

Table 115. Europe Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2023) & (Units)

Table 116. Europe Single-mode and Multimode VCSEL Sales Quantity by Application (2024-2029) & (Units)

Table 117. Europe Single-mode and Multimode VCSEL Sales Quantity by Country (2018-2023) & (Units)

Table 118. Europe Single-mode and Multimode VCSEL Sales Quantity by Country (2024-2029) & (Units)

Table 119. Europe Single-mode and Multimode VCSEL Consumption Value by Country



(2018-2023) & (USD Million)

Table 120. Europe Single-mode and Multimode VCSEL Consumption Value by Country (2024-2029) & (USD Million)

Table 121. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2023) & (Units)

Table 122. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Type (2024-2029) & (Units)

Table 123. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2023) & (Units)

Table 124. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Application (2024-2029) & (Units)

Table 125. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Region (2018-2023) & (Units)

Table 126. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity by Region (2024-2029) & (Units)

Table 127. Asia-Pacific Single-mode and Multimode VCSEL Consumption Value by Region (2018-2023) & (USD Million)

Table 128. Asia-Pacific Single-mode and Multimode VCSEL Consumption Value by Region (2024-2029) & (USD Million)

Table 129. South America Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2023) & (Units)

Table 130. South America Single-mode and Multimode VCSEL Sales Quantity by Type (2024-2029) & (Units)

Table 131. South America Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2023) & (Units)

Table 132. South America Single-mode and Multimode VCSEL Sales Quantity by Application (2024-2029) & (Units)

Table 133. South America Single-mode and Multimode VCSEL Sales Quantity by Country (2018-2023) & (Units)

Table 134. South America Single-mode and Multimode VCSEL Sales Quantity by Country (2024-2029) & (Units)

Table 135. South America Single-mode and Multimode VCSEL Consumption Value by Country (2018-2023) & (USD Million)

Table 136. South America Single-mode and Multimode VCSEL Consumption Value by Country (2024-2029) & (USD Million)

Table 137. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Type (2018-2023) & (Units)

Table 138. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Type (2024-2029) & (Units)



Table 139. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Application (2018-2023) & (Units)

Table 140. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Application (2024-2029) & (Units)

Table 141. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Region (2018-2023) & (Units)

Table 142. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity by Region (2024-2029) & (Units)

Table 143. Middle East & Africa Single-mode and Multimode VCSEL Consumption Value by Region (2018-2023) & (USD Million)

Table 144. Middle East & Africa Single-mode and Multimode VCSEL Consumption Value by Region (2024-2029) & (USD Million)

Table 145. Single-mode and Multimode VCSEL Raw Material

Table 146. Key Manufacturers of Single-mode and Multimode VCSEL Raw Materials

Table 147. Single-mode and Multimode VCSEL Typical Distributors

Table 148. Single-mode and Multimode VCSEL Typical Customers



# **List Of Figures**

#### LIST OF FIGURES

Figure 1. Single-mode and Multimode VCSEL Picture

Figure 2. Global Single-mode and Multimode VCSEL Consumption Value by Type,

(USD Million), 2018 & 2022 & 2029

Figure 3. Global Single-mode and Multimode VCSEL Consumption Value Market Share by Type in 2022

Figure 4. 760 nm Examples

Figure 5. 780 nm Examples

Figure 6. 850 nm Examples

Figure 7. 940 nm Examples

Figure 8. Global Single-mode and Multimode VCSEL Consumption Value by

Application, (USD Million), 2018 & 2022 & 2029

Figure 9. Global Single-mode and Multimode VCSEL Consumption Value Market Share by Application in 2022

Figure 10. Optical Communication Examples

Figure 11. Optical Storage Examples

Figure 12. Optical Sensor Examples

Figure 13. Others Examples

Figure 14. Global Single-mode and Multimode VCSEL Consumption Value, (USD Million): 2018 & 2022 & 2029

Figure 15. Global Single-mode and Multimode VCSEL Consumption Value and Forecast (2018-2029) & (USD Million)

Figure 16. Global Single-mode and Multimode VCSEL Sales Quantity (2018-2029) & (Units)

Figure 17. Global Single-mode and Multimode VCSEL Average Price (2018-2029) & (US\$/Unit)

Figure 18. Global Single-mode and Multimode VCSEL Sales Quantity Market Share by Manufacturer in 2022

Figure 19. Global Single-mode and Multimode VCSEL Consumption Value Market Share by Manufacturer in 2022

Figure 20. Producer Shipments of Single-mode and Multimode VCSEL by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2021

Figure 21. Top 3 Single-mode and Multimode VCSEL Manufacturer (Consumption Value) Market Share in 2022

Figure 22. Top 6 Single-mode and Multimode VCSEL Manufacturer (Consumption Value) Market Share in 2022



Figure 23. Global Single-mode and Multimode VCSEL Sales Quantity Market Share by Region (2018-2029)

Figure 24. Global Single-mode and Multimode VCSEL Consumption Value Market Share by Region (2018-2029)

Figure 25. North America Single-mode and Multimode VCSEL Consumption Value (2018-2029) & (USD Million)

Figure 26. Europe Single-mode and Multimode VCSEL Consumption Value (2018-2029) & (USD Million)

Figure 27. Asia-Pacific Single-mode and Multimode VCSEL Consumption Value (2018-2029) & (USD Million)

Figure 28. South America Single-mode and Multimode VCSEL Consumption Value (2018-2029) & (USD Million)

Figure 29. Middle East & Africa Single-mode and Multimode VCSEL Consumption Value (2018-2029) & (USD Million)

Figure 30. Global Single-mode and Multimode VCSEL Sales Quantity Market Share by Type (2018-2029)

Figure 31. Global Single-mode and Multimode VCSEL Consumption Value Market Share by Type (2018-2029)

Figure 32. Global Single-mode and Multimode VCSEL Average Price by Type (2018-2029) & (US\$/Unit)

Figure 33. Global Single-mode and Multimode VCSEL Sales Quantity Market Share by Application (2018-2029)

Figure 34. Global Single-mode and Multimode VCSEL Consumption Value Market Share by Application (2018-2029)

Figure 35. Global Single-mode and Multimode VCSEL Average Price by Application (2018-2029) & (US\$/Unit)

Figure 36. North America Single-mode and Multimode VCSEL Sales Quantity Market Share by Type (2018-2029)

Figure 37. North America Single-mode and Multimode VCSEL Sales Quantity Market Share by Application (2018-2029)

Figure 38. North America Single-mode and Multimode VCSEL Sales Quantity Market Share by Country (2018-2029)

Figure 39. North America Single-mode and Multimode VCSEL Consumption Value Market Share by Country (2018-2029)

Figure 40. United States Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 41. Canada Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 42. Mexico Single-mode and Multimode VCSEL Consumption Value and Growth



Rate (2018-2029) & (USD Million)

Figure 43. Europe Single-mode and Multimode VCSEL Sales Quantity Market Share by Type (2018-2029)

Figure 44. Europe Single-mode and Multimode VCSEL Sales Quantity Market Share by Application (2018-2029)

Figure 45. Europe Single-mode and Multimode VCSEL Sales Quantity Market Share by Country (2018-2029)

Figure 46. Europe Single-mode and Multimode VCSEL Consumption Value Market Share by Country (2018-2029)

Figure 47. Germany Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 48. France Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 49. United Kingdom Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 50. Russia Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 51. Italy Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 52. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity Market Share by Type (2018-2029)

Figure 53. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity Market Share by Application (2018-2029)

Figure 54. Asia-Pacific Single-mode and Multimode VCSEL Sales Quantity Market Share by Region (2018-2029)

Figure 55. Asia-Pacific Single-mode and Multimode VCSEL Consumption Value Market Share by Region (2018-2029)

Figure 56. China Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 57. Japan Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 58. Korea Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 59. India Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 60. Southeast Asia Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 61. Australia Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)



Figure 62. South America Single-mode and Multimode VCSEL Sales Quantity Market Share by Type (2018-2029)

Figure 63. South America Single-mode and Multimode VCSEL Sales Quantity Market Share by Application (2018-2029)

Figure 64. South America Single-mode and Multimode VCSEL Sales Quantity Market Share by Country (2018-2029)

Figure 65. South America Single-mode and Multimode VCSEL Consumption Value Market Share by Country (2018-2029)

Figure 66. Brazil Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 67. Argentina Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 68. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity Market Share by Type (2018-2029)

Figure 69. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity Market Share by Application (2018-2029)

Figure 70. Middle East & Africa Single-mode and Multimode VCSEL Sales Quantity Market Share by Region (2018-2029)

Figure 71. Middle East & Africa Single-mode and Multimode VCSEL Consumption Value Market Share by Region (2018-2029)

Figure 72. Turkey Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 73. Egypt Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 74. Saudi Arabia Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 75. South Africa Single-mode and Multimode VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 76. Single-mode and Multimode VCSEL Market Drivers

Figure 77. Single-mode and Multimode VCSEL Market Restraints

Figure 78. Single-mode and Multimode VCSEL Market Trends

Figure 79. Porters Five Forces Analysis

Figure 80. Manufacturing Cost Structure Analysis of Single-mode and Multimode VCSEL in 2022

Figure 81. Manufacturing Process Analysis of Single-mode and Multimode VCSEL

- Figure 82. Single-mode and Multimode VCSEL Industrial Chain
- Figure 83. Sales Quantity Channel: Direct to End-User vs Distributors
- Figure 84. Direct Channel Pros & Cons
- Figure 85. Indirect Channel Pros & Cons

Global Single-mode and Multimode VCSEL Market 2023 by Manufacturers, Regions, Type and Application, Forecast t...



Figure 86. Methodology Figure 87. Research Process and Data Source



#### I would like to order

Product name: Global Single-mode and Multimode VCSEL Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029

Product link: https://marketpublishers.com/r/G0972D0129DBEN.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 <u>https://marketpublishers.com/r/G0972D0129DBEN.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 Single-mode and Multimode VCSEL Market 2023 by Manufacturers, Regions, Type and Application, Forecast t...