

# Global NIR VCSEL Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029

https://marketpublishers.com/r/GBF21A826914EN.html

Date: November 2023

Pages: 88

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

ID: GBF21A826914EN

# **Abstracts**

According to our (Global Info Research) latest study, the global NIR 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.

The NIR VCSEL (Near-Infrared Vertical-Cavity Surface-Emitting Laser) is a near-infrared vertical cavity surface-emitting laser. It is a special type of semiconductor laser that generates laser radiation through a vertical cavity structure and surface emission.

As a highly efficient, narrow linewidth, fast modulation and low power consumption laser, the NIR VCSEL has broad application prospects.

The Global Info Research report includes an overview of the development of the NIR VCSEL industry chain, the market status of Automotive Lidar (Single-mode, Multimode), Robot (Single-mode, Multimode), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of NIR VCSEL.

Regionally, the report analyzes the NIR 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 NIR VCSEL market, with robust domestic demand, supportive policies, and a strong manufacturing base.

**Key Features:** 

The report presents comprehensive understanding of the NIR 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 NIR 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., Single-mode, Multimode).

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 NIR VCSEL market.

Regional Analysis: The report involves examining the NIR 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 NIR 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 NIR VCSEL:

Company Analysis: Report covers individual NIR 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 NIR VCSEL This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Automotive Lidar, Robot).

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

Competitive Landscape: By analyzing individual companies, suppliers, and consumers,



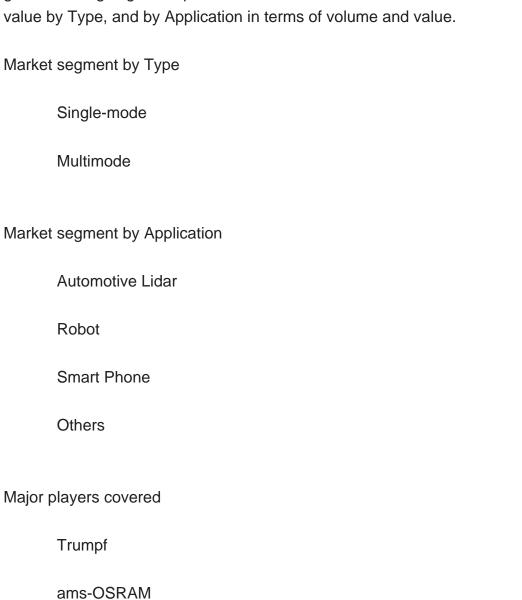
the report present insights into the competitive landscape of the NIR VCSEL market. This analysis helps understand market share, competitive advantages, and potential areas for differentiation among industry players.

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

Market Segmentation

Vertilas

NIR 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.





Konica Minolta

**Princeton Optronics** 

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

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

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

Chapter 4, the NIR 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 NIR 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 NIR VCSEL.

Chapter 14 and 15, to describe NIR VCSEL sales channel, distributors, customers, research findings and conclusion.



### **Contents**

#### 1 MARKET OVERVIEW

- 1.1 Product Overview and Scope of NIR VCSEL
- 1.2 Market Estimation Caveats and Base Year
- 1.3 Market Analysis by Type
- 1.3.1 Overview: Global NIR VCSEL Consumption Value by Type: 2018 Versus 2022 Versus 2029
  - 1.3.2 Single-mode
  - 1.3.3 Multimode
- 1.4 Market Analysis by Application
- 1.4.1 Overview: Global NIR VCSEL Consumption Value by Application: 2018 Versus 2022 Versus 2029
- 1.4.2 Automotive Lidar
- 1.4.3 Robot
- 1.4.4 Smart Phone
- 1.4.5 Others
- 1.5 Global NIR VCSEL Market Size & Forecast
  - 1.5.1 Global NIR VCSEL Consumption Value (2018 & 2022 & 2029)
  - 1.5.2 Global NIR VCSEL Sales Quantity (2018-2029)
  - 1.5.3 Global NIR VCSEL Average Price (2018-2029)

#### **2 MANUFACTURERS PROFILES**

- 2.1 Trumpf
  - 2.1.1 Trumpf Details
  - 2.1.2 Trumpf Major Business
  - 2.1.3 Trumpf NIR VCSEL Product and Services
- 2.1.4 Trumpf NIR VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
  - 2.1.5 Trumpf Recent Developments/Updates
- 2.2 ams-OSRAM
  - 2.2.1 ams-OSRAM Details
  - 2.2.2 ams-OSRAM Major Business
  - 2.2.3 ams-OSRAM NIR VCSEL Product and Services
  - 2.2.4 ams-OSRAM NIR VCSEL Sales Quantity, Average Price, Revenue, Gross

Margin and Market Share (2018-2023)

2.2.5 ams-OSRAM Recent Developments/Updates



- 2.3 Vertilas
  - 2.3.1 Vertilas Details
  - 2.3.2 Vertilas Major Business
  - 2.3.3 Vertilas NIR VCSEL Product and Services
- 2.3.4 Vertilas NIR VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
- 2.3.5 Vertilas Recent Developments/Updates
- 2.4 Konica Minolta
  - 2.4.1 Konica Minolta Details
  - 2.4.2 Konica Minolta Major Business
  - 2.4.3 Konica Minolta NIR VCSEL Product and Services
- 2.4.4 Konica Minolta NIR VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
  - 2.4.5 Konica Minolta Recent Developments/Updates
- 2.5 Princeton Optronics
  - 2.5.1 Princeton Optronics Details
  - 2.5.2 Princeton Optronics Major Business
  - 2.5.3 Princeton Optronics NIR VCSEL Product and Services
- 2.5.4 Princeton Optronics NIR VCSEL Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
  - 2.5.5 Princeton Optronics Recent Developments/Updates

#### 3 COMPETITIVE ENVIRONMENT: NIR VCSEL BY MANUFACTURER

- 3.1 Global NIR VCSEL Sales Quantity by Manufacturer (2018-2023)
- 3.2 Global NIR VCSEL Revenue by Manufacturer (2018-2023)
- 3.3 Global NIR VCSEL Average Price by Manufacturer (2018-2023)
- 3.4 Market Share Analysis (2022)
- 3.4.1 Producer Shipments of NIR VCSEL by Manufacturer Revenue (\$MM) and Market Share (%): 2022
  - 3.4.2 Top 3 NIR VCSEL Manufacturer Market Share in 2022
  - 3.4.2 Top 6 NIR VCSEL Manufacturer Market Share in 2022
- 3.5 NIR VCSEL Market: Overall Company Footprint Analysis
  - 3.5.1 NIR VCSEL Market: Region Footprint
  - 3.5.2 NIR VCSEL Market: Company Product Type Footprint
  - 3.5.3 NIR 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 NIR VCSEL Market Size by Region
  - 4.1.1 Global NIR VCSEL Sales Quantity by Region (2018-2029)
  - 4.1.2 Global NIR VCSEL Consumption Value by Region (2018-2029)
- 4.1.3 Global NIR VCSEL Average Price by Region (2018-2029)
- 4.2 North America NIR VCSEL Consumption Value (2018-2029)
- 4.3 Europe NIR VCSEL Consumption Value (2018-2029)
- 4.4 Asia-Pacific NIR VCSEL Consumption Value (2018-2029)
- 4.5 South America NIR VCSEL Consumption Value (2018-2029)
- 4.6 Middle East and Africa NIR VCSEL Consumption Value (2018-2029)

#### **5 MARKET SEGMENT BY TYPE**

- 5.1 Global NIR VCSEL Sales Quantity by Type (2018-2029)
- 5.2 Global NIR VCSEL Consumption Value by Type (2018-2029)
- 5.3 Global NIR VCSEL Average Price by Type (2018-2029)

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

- 6.1 Global NIR VCSEL Sales Quantity by Application (2018-2029)
- 6.2 Global NIR VCSEL Consumption Value by Application (2018-2029)
- 6.3 Global NIR VCSEL Average Price by Application (2018-2029)

#### 7 NORTH AMERICA

- 7.1 North America NIR VCSEL Sales Quantity by Type (2018-2029)
- 7.2 North America NIR VCSEL Sales Quantity by Application (2018-2029)
- 7.3 North America NIR VCSEL Market Size by Country
  - 7.3.1 North America NIR VCSEL Sales Quantity by Country (2018-2029)
- 7.3.2 North America NIR 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 NIR VCSEL Sales Quantity by Type (2018-2029)
- 8.2 Europe NIR VCSEL Sales Quantity by Application (2018-2029)



- 8.3 Europe NIR VCSEL Market Size by Country
- 8.3.1 Europe NIR VCSEL Sales Quantity by Country (2018-2029)
- 8.3.2 Europe NIR 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 NIR VCSEL Sales Quantity by Type (2018-2029)
- 9.2 Asia-Pacific NIR VCSEL Sales Quantity by Application (2018-2029)
- 9.3 Asia-Pacific NIR VCSEL Market Size by Region
  - 9.3.1 Asia-Pacific NIR VCSEL Sales Quantity by Region (2018-2029)
  - 9.3.2 Asia-Pacific NIR 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 NIR VCSEL Sales Quantity by Type (2018-2029)
- 10.2 South America NIR VCSEL Sales Quantity by Application (2018-2029)
- 10.3 South America NIR VCSEL Market Size by Country
  - 10.3.1 South America NIR VCSEL Sales Quantity by Country (2018-2029)
  - 10.3.2 South America NIR 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 NIR VCSEL Sales Quantity by Type (2018-2029)
- 11.2 Middle East & Africa NIR VCSEL Sales Quantity by Application (2018-2029)
- 11.3 Middle East & Africa NIR VCSEL Market Size by Country
  - 11.3.1 Middle East & Africa NIR VCSEL Sales Quantity by Country (2018-2029)



- 11.3.2 Middle East & Africa NIR 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 NIR VCSEL Market Drivers
- 12.2 NIR VCSEL Market Restraints
- 12.3 NIR 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 NIR VCSEL and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of NIR VCSEL
- 13.3 NIR VCSEL Production Process
- 13.4 NIR 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 NIR VCSEL Typical Distributors
- 14.3 NIR 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 NIR VCSEL Consumption Value by Type, (USD Million), 2018 & 2022 & 2029
- Table 2. Global NIR VCSEL Consumption Value by Application, (USD Million), 2018 & 2022 & 2029
- Table 3. Trumpf Basic Information, Manufacturing Base and Competitors
- Table 4. Trumpf Major Business
- Table 5. Trumpf NIR VCSEL Product and Services
- Table 6. Trumpf NIR VCSEL Sales Quantity (Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 7. Trumpf Recent Developments/Updates
- Table 8. ams-OSRAM Basic Information, Manufacturing Base and Competitors
- Table 9. ams-OSRAM Major Business
- Table 10. ams-OSRAM NIR VCSEL Product and Services
- Table 11. ams-OSRAM NIR VCSEL Sales Quantity (Units), Average Price (US\$/Unit),
- Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 12. ams-OSRAM Recent Developments/Updates
- Table 13. Vertilas Basic Information, Manufacturing Base and Competitors
- Table 14. Vertilas Major Business
- Table 15. Vertilas NIR VCSEL Product and Services
- Table 16. Vertilas NIR VCSEL Sales Quantity (Units), Average Price (US\$/Unit),
- Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 17. Vertilas Recent Developments/Updates
- Table 18. Konica Minolta Basic Information, Manufacturing Base and Competitors
- Table 19. Konica Minolta Major Business
- Table 20. Konica Minolta NIR VCSEL Product and Services
- Table 21. Konica Minolta NIR VCSEL Sales Quantity (Units), Average Price (US\$/Unit),
- Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 22. Konica Minolta Recent Developments/Updates
- Table 23. Princeton Optronics Basic Information, Manufacturing Base and Competitors
- Table 24. Princeton Optronics Major Business
- Table 25. Princeton Optronics NIR VCSEL Product and Services
- Table 26. Princeton Optronics NIR VCSEL Sales Quantity (Units), Average Price
- (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 27. Princeton Optronics Recent Developments/Updates
- Table 28. Global NIR VCSEL Sales Quantity by Manufacturer (2018-2023) & (Units)



- Table 29. Global NIR VCSEL Revenue by Manufacturer (2018-2023) & (USD Million)
- Table 30. Global NIR VCSEL Average Price by Manufacturer (2018-2023) & (US\$/Unit)
- Table 31. Market Position of Manufacturers in NIR VCSEL, (Tier 1, Tier 2, and Tier 3),
- Based on Consumption Value in 2022
- Table 32. Head Office and NIR VCSEL Production Site of Key Manufacturer
- Table 33. NIR VCSEL Market: Company Product Type Footprint
- Table 34. NIR VCSEL Market: Company Product Application Footprint
- Table 35. NIR VCSEL New Market Entrants and Barriers to Market Entry
- Table 36. NIR VCSEL Mergers, Acquisition, Agreements, and Collaborations
- Table 37. Global NIR VCSEL Sales Quantity by Region (2018-2023) & (Units)
- Table 38. Global NIR VCSEL Sales Quantity by Region (2024-2029) & (Units)
- Table 39. Global NIR VCSEL Consumption Value by Region (2018-2023) & (USD Million)
- Table 40. Global NIR VCSEL Consumption Value by Region (2024-2029) & (USD Million)
- Table 41. Global NIR VCSEL Average Price by Region (2018-2023) & (US\$/Unit)
- Table 42. Global NIR VCSEL Average Price by Region (2024-2029) & (US\$/Unit)
- Table 43. Global NIR VCSEL Sales Quantity by Type (2018-2023) & (Units)
- Table 44. Global NIR VCSEL Sales Quantity by Type (2024-2029) & (Units)
- Table 45. Global NIR VCSEL Consumption Value by Type (2018-2023) & (USD Million)
- Table 46. Global NIR VCSEL Consumption Value by Type (2024-2029) & (USD Million)
- Table 47. Global NIR VCSEL Average Price by Type (2018-2023) & (US\$/Unit)
- Table 48. Global NIR VCSEL Average Price by Type (2024-2029) & (US\$/Unit)
- Table 49. Global NIR VCSEL Sales Quantity by Application (2018-2023) & (Units)
- Table 50. Global NIR VCSEL Sales Quantity by Application (2024-2029) & (Units)
- Table 51. Global NIR VCSEL Consumption Value by Application (2018-2023) & (USD Million)
- Table 52. Global NIR VCSEL Consumption Value by Application (2024-2029) & (USD Million)
- Table 53. Global NIR VCSEL Average Price by Application (2018-2023) & (US\$/Unit)
- Table 54. Global NIR VCSEL Average Price by Application (2024-2029) & (US\$/Unit)
- Table 55. North America NIR VCSEL Sales Quantity by Type (2018-2023) & (Units)
- Table 56. North America NIR VCSEL Sales Quantity by Type (2024-2029) & (Units)
- Table 57. North America NIR VCSEL Sales Quantity by Application (2018-2023) & (Units)
- Table 58. North America NIR VCSEL Sales Quantity by Application (2024-2029) & (Units)
- Table 59. North America NIR VCSEL Sales Quantity by Country (2018-2023) & (Units)
- Table 60. North America NIR VCSEL Sales Quantity by Country (2024-2029) & (Units)



- Table 61. North America NIR VCSEL Consumption Value by Country (2018-2023) & (USD Million)
- Table 62. North America NIR VCSEL Consumption Value by Country (2024-2029) & (USD Million)
- Table 63. Europe NIR VCSEL Sales Quantity by Type (2018-2023) & (Units)
- Table 64. Europe NIR VCSEL Sales Quantity by Type (2024-2029) & (Units)
- Table 65. Europe NIR VCSEL Sales Quantity by Application (2018-2023) & (Units)
- Table 66. Europe NIR VCSEL Sales Quantity by Application (2024-2029) & (Units)
- Table 67. Europe NIR VCSEL Sales Quantity by Country (2018-2023) & (Units)
- Table 68. Europe NIR VCSEL Sales Quantity by Country (2024-2029) & (Units)
- Table 69. Europe NIR VCSEL Consumption Value by Country (2018-2023) & (USD Million)
- Table 70. Europe NIR VCSEL Consumption Value by Country (2024-2029) & (USD Million)
- Table 71. Asia-Pacific NIR VCSEL Sales Quantity by Type (2018-2023) & (Units)
- Table 72. Asia-Pacific NIR VCSEL Sales Quantity by Type (2024-2029) & (Units)
- Table 73. Asia-Pacific NIR VCSEL Sales Quantity by Application (2018-2023) & (Units)
- Table 74. Asia-Pacific NIR VCSEL Sales Quantity by Application (2024-2029) & (Units)
- Table 75. Asia-Pacific NIR VCSEL Sales Quantity by Region (2018-2023) & (Units)
- Table 76. Asia-Pacific NIR VCSEL Sales Quantity by Region (2024-2029) & (Units)
- Table 77. Asia-Pacific NIR VCSEL Consumption Value by Region (2018-2023) & (USD Million)
- Table 78. Asia-Pacific NIR VCSEL Consumption Value by Region (2024-2029) & (USD Million)
- Table 79. South America NIR VCSEL Sales Quantity by Type (2018-2023) & (Units)
- Table 80. South America NIR VCSEL Sales Quantity by Type (2024-2029) & (Units)
- Table 81. South America NIR VCSEL Sales Quantity by Application (2018-2023) & (Units)
- Table 82. South America NIR VCSEL Sales Quantity by Application (2024-2029) & (Units)
- Table 83. South America NIR VCSEL Sales Quantity by Country (2018-2023) & (Units)
- Table 84. South America NIR VCSEL Sales Quantity by Country (2024-2029) & (Units)
- Table 85. South America NIR VCSEL Consumption Value by Country (2018-2023) & (USD Million)
- Table 86. South America NIR VCSEL Consumption Value by Country (2024-2029) & (USD Million)
- Table 87. Middle East & Africa NIR VCSEL Sales Quantity by Type (2018-2023) & (Units)
- Table 88. Middle East & Africa NIR VCSEL Sales Quantity by Type (2024-2029) &



(Units)

Table 89. Middle East & Africa NIR VCSEL Sales Quantity by Application (2018-2023) & (Units)

Table 90. Middle East & Africa NIR VCSEL Sales Quantity by Application (2024-2029) & (Units)

Table 91. Middle East & Africa NIR VCSEL Sales Quantity by Region (2018-2023) & (Units)

Table 92. Middle East & Africa NIR VCSEL Sales Quantity by Region (2024-2029) & (Units)

Table 93. Middle East & Africa NIR VCSEL Consumption Value by Region (2018-2023) & (USD Million)

Table 94. Middle East & Africa NIR VCSEL Consumption Value by Region (2024-2029) & (USD Million)

Table 95. NIR VCSEL Raw Material

Table 96. Key Manufacturers of NIR VCSEL Raw Materials

Table 97. NIR VCSEL Typical Distributors

Table 98. NIR VCSEL Typical Customers



# **List Of Figures**

#### LIST OF FIGURES

- Figure 1. NIR VCSEL Picture
- Figure 2. Global NIR VCSEL Consumption Value by Type, (USD Million), 2018 & 2022 & 2029
- Figure 3. Global NIR VCSEL Consumption Value Market Share by Type in 2022
- Figure 4. Single-mode Examples
- Figure 5. Multimode Examples
- Figure 6. Global NIR VCSEL Consumption Value by Application, (USD Million), 2018 & 2022 & 2029
- Figure 7. Global NIR VCSEL Consumption Value Market Share by Application in 2022
- Figure 8. Automotive Lidar Examples
- Figure 9. Robot Examples
- Figure 10. Smart Phone Examples
- Figure 11. Others Examples
- Figure 12. Global NIR VCSEL Consumption Value, (USD Million): 2018 & 2022 & 2029
- Figure 13. Global NIR VCSEL Consumption Value and Forecast (2018-2029) & (USD Million)
- Figure 14. Global NIR VCSEL Sales Quantity (2018-2029) & (Units)
- Figure 15. Global NIR VCSEL Average Price (2018-2029) & (US\$/Unit)
- Figure 16. Global NIR VCSEL Sales Quantity Market Share by Manufacturer in 2022
- Figure 17. Global NIR VCSEL Consumption Value Market Share by Manufacturer in 2022
- Figure 18. Producer Shipments of NIR VCSEL by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2021
- Figure 19. Top 3 NIR VCSEL Manufacturer (Consumption Value) Market Share in 2022
- Figure 20. Top 6 NIR VCSEL Manufacturer (Consumption Value) Market Share in 2022
- Figure 21. Global NIR VCSEL Sales Quantity Market Share by Region (2018-2029)
- Figure 22. Global NIR VCSEL Consumption Value Market Share by Region (2018-2029)
- Figure 23. North America NIR VCSEL Consumption Value (2018-2029) & (USD Million)
- Figure 24. Europe NIR VCSEL Consumption Value (2018-2029) & (USD Million)
- Figure 25. Asia-Pacific NIR VCSEL Consumption Value (2018-2029) & (USD Million)
- Figure 26. South America NIR VCSEL Consumption Value (2018-2029) & (USD Million)
- Figure 27. Middle East & Africa NIR VCSEL Consumption Value (2018-2029) & (USD Million)
- Figure 28. Global NIR VCSEL Sales Quantity Market Share by Type (2018-2029)



- Figure 29. Global NIR VCSEL Consumption Value Market Share by Type (2018-2029)
- Figure 30. Global NIR VCSEL Average Price by Type (2018-2029) & (US\$/Unit)
- Figure 31. Global NIR VCSEL Sales Quantity Market Share by Application (2018-2029)
- Figure 32. Global NIR VCSEL Consumption Value Market Share by Application (2018-2029)
- Figure 33. Global NIR VCSEL Average Price by Application (2018-2029) & (US\$/Unit)
- Figure 34. North America NIR VCSEL Sales Quantity Market Share by Type (2018-2029)
- Figure 35. North America NIR VCSEL Sales Quantity Market Share by Application (2018-2029)
- Figure 36. North America NIR VCSEL Sales Quantity Market Share by Country (2018-2029)
- Figure 37. North America NIR VCSEL Consumption Value Market Share by Country (2018-2029)
- Figure 38. United States NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)
- Figure 39. Canada NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)
- Figure 40. Mexico NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)
- Figure 41. Europe NIR VCSEL Sales Quantity Market Share by Type (2018-2029)
- Figure 42. Europe NIR VCSEL Sales Quantity Market Share by Application (2018-2029)
- Figure 43. Europe NIR VCSEL Sales Quantity Market Share by Country (2018-2029)
- Figure 44. Europe NIR VCSEL Consumption Value Market Share by Country (2018-2029)
- Figure 45. Germany NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)
- Figure 46. France NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)
- Figure 47. United Kingdom NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)
- Figure 48. Russia NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)
- Figure 49. Italy NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)
- Figure 50. Asia-Pacific NIR VCSEL Sales Quantity Market Share by Type (2018-2029)
- Figure 51. Asia-Pacific NIR VCSEL Sales Quantity Market Share by Application (2018-2029)
- Figure 52. Asia-Pacific NIR VCSEL Sales Quantity Market Share by Region



(2018-2029)

Figure 53. Asia-Pacific NIR VCSEL Consumption Value Market Share by Region (2018-2029)

Figure 54. China NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 55. Japan NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 56. Korea NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 57. India NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 58. Southeast Asia NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 59. Australia NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 60. South America NIR VCSEL Sales Quantity Market Share by Type (2018-2029)

Figure 61. South America NIR VCSEL Sales Quantity Market Share by Application (2018-2029)

Figure 62. South America NIR VCSEL Sales Quantity Market Share by Country (2018-2029)

Figure 63. South America NIR VCSEL Consumption Value Market Share by Country (2018-2029)

Figure 64. Brazil NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 65. Argentina NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 66. Middle East & Africa NIR VCSEL Sales Quantity Market Share by Type (2018-2029)

Figure 67. Middle East & Africa NIR VCSEL Sales Quantity Market Share by Application (2018-2029)

Figure 68. Middle East & Africa NIR VCSEL Sales Quantity Market Share by Region (2018-2029)

Figure 69. Middle East & Africa NIR VCSEL Consumption Value Market Share by Region (2018-2029)

Figure 70. Turkey NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 71. Egypt NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)



Figure 72. Saudi Arabia NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 73. South Africa NIR VCSEL Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 74. NIR VCSEL Market Drivers

Figure 75. NIR VCSEL Market Restraints

Figure 76. NIR VCSEL Market Trends

Figure 77. Porters Five Forces Analysis

Figure 78. Manufacturing Cost Structure Analysis of NIR VCSEL in 2022

Figure 79. Manufacturing Process Analysis of NIR VCSEL

Figure 80. NIR VCSEL Industrial Chain

Figure 81. Sales Quantity Channel: Direct to End-User vs Distributors

Figure 82. Direct Channel Pros & Cons

Figure 83. Indirect Channel Pros & Cons

Figure 84. Methodology

Figure 85. Research Process and Data Source



#### I would like to order

Product name: Global NIR VCSEL Market 2023 by Manufacturers, Regions, Type and Application,

Forecast to 2029

Product link: <a href="https://marketpublishers.com/r/GBF21A826914EN.html">https://marketpublishers.com/r/GBF21A826914EN.html</a>

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**

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/GBF21A826914EN.html">https://marketpublishers.com/r/GBF21A826914EN.html</a>

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

| Last name:    |                           |
|---------------|---------------------------|
| Email:        |                           |
| Company:      |                           |
| Address:      |                           |
| City:         |                           |
| Zip code:     |                           |
|               |                           |
| Country:      |                           |
| Tel:          |                           |
| Fax:          |                           |
| Your message: |                           |
|               |                           |
|               |                           |
|               |                           |
|               | **All fields are required |
|               | All fields are required   |
|               | Custumer signature        |
|               |                           |
|               |                           |

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

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

