

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Supply, Demand and Key Producers, 2023-2029

<https://marketpublishers.com/r/G4D2D3A23211EN.html>

Date: July 2023

Pages: 113

Price: US\$ 4,480.00 (Single User License)

ID: G4D2D3A23211EN

Abstracts

The global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) market size is expected to reach \$ million by 2029, rising at a market growth of % CAGR during the forecast period (2023-2029).

Shortwave infrared vertical cavity surface emitting lasers are used for highly integrated sensors under shortwave infrared light sources. Based on power levels and radiation characteristics, they are suitable for time-of-flight distance sensors. They have the characteristics of polarization stability, high modulation performance and power consumption.

This report studies the global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL), and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2022 as the base year. This report explores demand trends and competition, as well as details the characteristics of Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) total production and demand, 2018-2029, (Units)

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) total production value, 2018-2029, (USD Million)

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) production by region & country, production, value, CAGR, 2018-2029, (USD Million) & (Units)

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) consumption by region & country, CAGR, 2018-2029 & (Units)

U.S. VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) domestic production, consumption, key domestic manufacturers and share

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) production by manufacturer, production, price, value and market share 2018-2023, (USD Million) & (Units)

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) production by Type, production, value, CAGR, 2018-2029, (USD Million) & (Units)

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) production by Application production, value, CAGR, 2018-2029, (USD Million) & (Units)

This reports profiles key players in the global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) market based on the following parameters – company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Ams OSRAM AG, Broadcom, II-VI Incorporated, Inneos LLC, IQE PLC, Leonardo Electronics, Lumentum Operations LLC, Teledyne FLIR and Trumpf, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals, COVID-19 and Russia-Ukraine War Influence.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$

Millions), volume (production, consumption) & (Units) and average price (US\$/Unit) by manufacturer, by Type, and by Application. Data is given for the years 2018-2029 by year with 2022 as the base year, 2023 as the estimate year, and 2024-2029 as the forecast year.

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market, Segmentation by Type

Single-mode

Multi-mode

Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market, Segmentation by Application

Industrial

Electronics

Automotive

Medical

Others

Companies Profiled:

Ams OSRAM AG

Broadcom

II-VI Incorporated

Inneos LLC

IQE PLC

Leonardo Electronics

Lumentum Operations LLC

Teledyne FLIR

Trumpf

TT Electronics

Vertilas GmbH

Vertilite

Artlux

Key Questions Answered

1. How big is the global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) market?
2. What is the demand of the global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) market?
3. What is the year over year growth of the global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) market?
4. What is the production and production value of the global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) market?
5. Who are the key producers in the global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) market?
6. What are the growth factors driving the market demand?

Contents

1 SUPPLY SUMMARY

1.1 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Introduction

1.2 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Supply & Forecast

1.2.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value (2018 & 2022 & 2029)

1.2.2 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029)

1.2.3 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Pricing Trends (2018-2029)

1.3 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Region (Based on Production Site)

1.3.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Region (2018-2029)

1.3.2 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Region (2018-2029)

1.3.3 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Region (2018-2029)

1.3.4 North America Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029)

1.3.5 Europe Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029)

1.3.6 China Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029)

1.3.7 Japan Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029)

1.3.8 South Korea Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029)

1.4 Market Drivers, Restraints and Trends

1.4.1 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market Drivers

1.4.2 Factors Affecting Demand

1.4.3 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Major Market Trends

1.5 Influence of COVID-19 and Russia-Ukraine War

1.5.1 Influence of COVID-19

1.5.2 Influence of Russia-Ukraine War

2 DEMAND SUMMARY

2.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Demand (2018-2029)

2.2 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption by Region

2.2.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption by Region (2018-2023)

2.2.2 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Forecast by Region (2024-2029)

2.3 United States Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029)

2.4 China Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029)

2.5 Europe Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029)

2.6 Japan Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029)

2.7 South Korea Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029)

2.8 ASEAN Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029)

2.9 India Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029)

3 WORLD SHORTWAVE INFRARED VERTICAL CAVITY SURFACE EMITTING LASER (VCSEL) MANUFACTURERS COMPETITIVE ANALYSIS

3.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Manufacturer (2018-2023)

3.2 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Manufacturer (2018-2023)

3.3 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Manufacturer (2018-2023)

3.4 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Company Evaluation Quadrant

3.5 Industry Rank and Concentration Rate (CR)

3.5.1 Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Industry Rank of Major Manufacturers

3.5.2 Global Concentration Ratios (CR4) for Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) in 2022

3.5.3 Global Concentration Ratios (CR8) for Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) in 2022

3.6 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market: Overall Company Footprint Analysis

3.6.1 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market: Region Footprint

3.6.2 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market: Company Product Type Footprint

3.6.3 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market: Company Product Application Footprint

3.7 Competitive Environment

3.7.1 Historical Structure of the Industry

3.7.2 Barriers of Market Entry

3.7.3 Factors of Competition

3.8 New Entrant and Capacity Expansion Plans

3.9 Mergers, Acquisition, Agreements, and Collaborations

4 UNITED STATES VS CHINA VS REST OF THE WORLD

4.1 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Comparison

4.1.1 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Comparison (2018 & 2022 & 2029)

4.1.2 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share Comparison (2018 & 2022 & 2029)

4.2 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Comparison

4.2.1 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Comparison (2018 & 2022 & 2029)

4.2.2 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share Comparison (2018 & 2022 & 2029)

4.3 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Comparison

4.3.1 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Comparison (2018 & 2022 & 2029)

4.3.2 United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Market Share Comparison (2018 & 2022 & 2029)

4.4 United States Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers and Market Share, 2018-2023

4.4.1 United States Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers, Headquarters and Production Site (States, Country)

4.4.2 United States Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value (2018-2023)

4.4.3 United States Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2023)

4.5 China Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers and Market Share

4.5.1 China Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers, Headquarters and Production Site (Province, Country)

4.5.2 China Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value (2018-2023)

4.5.3 China Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2023)

4.6 Rest of World Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers and Market Share, 2018-2023

4.6.1 Rest of World Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers, Headquarters and Production Site (State, Country)

4.6.2 Rest of World Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value (2018-2023)

4.6.3 Rest of World Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2023)

5 MARKET ANALYSIS BY TYPE

5.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market Size Overview by Type: 2018 VS 2022 VS 2029

5.2 Segment Introduction by Type

5.2.1 Single-mode

5.2.2 Multi-mode

5.3 Market Segment by Type

5.3.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Type (2018-2029)

5.3.2 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Type (2018-2029)

5.3.3 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)
Average Price by Type (2018-2029)

6 MARKET ANALYSIS BY APPLICATION

6.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market
Size Overview by Application: 2018 VS 2022 VS 2029

6.2 Segment Introduction by Application

6.2.1 Industrial

6.2.2 Electronics

6.2.3 Automotive

6.2.4 Medical

6.2.5 Others

6.3 Market Segment by Application

6.3.1 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)
Production by Application (2018-2029)

6.3.2 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)
Production Value by Application (2018-2029)

6.3.3 World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)
Average Price by Application (2018-2029)

7 COMPANY PROFILES

7.1 Ams OSRAM AG

7.1.1 Ams OSRAM AG Details

7.1.2 Ams OSRAM AG Major Business

7.1.3 Ams OSRAM AG Shortwave Infrared Vertical Cavity Surface Emitting Laser
(VCSEL) Product and Services

7.1.4 Ams OSRAM AG Shortwave Infrared Vertical Cavity Surface Emitting Laser
(VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.1.5 Ams OSRAM AG Recent Developments/Updates

7.1.6 Ams OSRAM AG Competitive Strengths & Weaknesses

7.2 Broadcom

7.2.1 Broadcom Details

7.2.2 Broadcom Major Business

7.2.3 Broadcom Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)
Product and Services

7.2.4 Broadcom Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)
Production, Price, Value, Gross Margin and Market Share (2018-2023)

- 7.2.5 Broadcom Recent Developments/Updates
- 7.2.6 Broadcom Competitive Strengths & Weaknesses
- 7.3 II-VI Incorporated
 - 7.3.1 II-VI Incorporated Details
 - 7.3.2 II-VI Incorporated Major Business
 - 7.3.3 II-VI Incorporated Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services
 - 7.3.4 II-VI Incorporated Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)
 - 7.3.5 II-VI Incorporated Recent Developments/Updates
 - 7.3.6 II-VI Incorporated Competitive Strengths & Weaknesses
- 7.4 Inneos LLC
 - 7.4.1 Inneos LLC Details
 - 7.4.2 Inneos LLC Major Business
 - 7.4.3 Inneos LLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services
 - 7.4.4 Inneos LLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)
 - 7.4.5 Inneos LLC Recent Developments/Updates
 - 7.4.6 Inneos LLC Competitive Strengths & Weaknesses
- 7.5 IQE PLC
 - 7.5.1 IQE PLC Details
 - 7.5.2 IQE PLC Major Business
 - 7.5.3 IQE PLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services
 - 7.5.4 IQE PLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)
 - 7.5.5 IQE PLC Recent Developments/Updates
 - 7.5.6 IQE PLC Competitive Strengths & Weaknesses
- 7.6 Leonardo Electronics
 - 7.6.1 Leonardo Electronics Details
 - 7.6.2 Leonardo Electronics Major Business
 - 7.6.3 Leonardo Electronics Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services
 - 7.6.4 Leonardo Electronics Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)
 - 7.6.5 Leonardo Electronics Recent Developments/Updates
 - 7.6.6 Leonardo Electronics Competitive Strengths & Weaknesses
- 7.7 Lumentum Operations LLC

- 7.7.1 Lumentum Operations LLC Details
- 7.7.2 Lumentum Operations LLC Major Business
- 7.7.3 Lumentum Operations LLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services
- 7.7.4 Lumentum Operations LLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)
- 7.7.5 Lumentum Operations LLC Recent Developments/Updates
- 7.7.6 Lumentum Operations LLC Competitive Strengths & Weaknesses
- 7.8 Teledyne FLIR
 - 7.8.1 Teledyne FLIR Details
 - 7.8.2 Teledyne FLIR Major Business
 - 7.8.3 Teledyne FLIR Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services
 - 7.8.4 Teledyne FLIR Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)
 - 7.8.5 Teledyne FLIR Recent Developments/Updates
 - 7.8.6 Teledyne FLIR Competitive Strengths & Weaknesses
- 7.9 Trumpf
 - 7.9.1 Trumpf Details
 - 7.9.2 Trumpf Major Business
 - 7.9.3 Trumpf Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services
 - 7.9.4 Trumpf Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)
 - 7.9.5 Trumpf Recent Developments/Updates
 - 7.9.6 Trumpf Competitive Strengths & Weaknesses
- 7.10 TT Electronics
 - 7.10.1 TT Electronics Details
 - 7.10.2 TT Electronics Major Business
 - 7.10.3 TT Electronics Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services
 - 7.10.4 TT Electronics Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)
 - 7.10.5 TT Electronics Recent Developments/Updates
 - 7.10.6 TT Electronics Competitive Strengths & Weaknesses
- 7.11 Vertilas GmbH
 - 7.11.1 Vertilas GmbH Details
 - 7.11.2 Vertilas GmbH Major Business
 - 7.11.3 Vertilas GmbH Shortwave Infrared Vertical Cavity Surface Emitting Laser

(VCSEL) Product and Services

7.11.4 Vertilas GmbH Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.11.5 Vertilas GmbH Recent Developments/Updates

7.11.6 Vertilas GmbH Competitive Strengths & Weaknesses

7.12 Vertilite

7.12.1 Vertilite Details

7.12.2 Vertilite Major Business

7.12.3 Vertilite Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

7.12.4 Vertilite Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.12.5 Vertilite Recent Developments/Updates

7.12.6 Vertilite Competitive Strengths & Weaknesses

7.13 Artilux

7.13.1 Artilux Details

7.13.2 Artilux Major Business

7.13.3 Artilux Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

7.13.4 Artilux Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.13.5 Artilux Recent Developments/Updates

7.13.6 Artilux Competitive Strengths & Weaknesses

8 INDUSTRY CHAIN ANALYSIS

8.1 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Industry Chain

8.2 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Upstream Analysis

8.2.1 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Core Raw Materials

8.2.2 Main Manufacturers of Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Core Raw Materials

8.3 Midstream Analysis

8.4 Downstream Analysis

8.5 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Mode

8.6 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Procurement Model

8.7 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Industry Sales Model and Sales Channels

8.7.1 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Sales Model

8.7.2 Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Typical Customers

9 RESEARCH FINDINGS AND CONCLUSION

10 APPENDIX

10.1 Methodology

10.2 Research Process and Data Source

10.3 Disclaimer

List Of Tables

LIST OF TABLES

Table 1. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Region (2018, 2022 and 2029) & (USD Million)

Table 2. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Region (2018-2023) & (USD Million)

Table 3. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Region (2024-2029) & (USD Million)

Table 4. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share by Region (2018-2023)

Table 5. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share by Region (2024-2029)

Table 6. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Region (2018-2023) & (Units)

Table 7. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Region (2024-2029) & (Units)

Table 8. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share by Region (2018-2023)

Table 9. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share by Region (2024-2029)

Table 10. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Region (2018-2023) & (US\$/Unit)

Table 11. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Region (2024-2029) & (US\$/Unit)

Table 12. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Major Market Trends

Table 13. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Growth Rate Forecast by Region (2018 & 2022 & 2029) & (Units)

Table 14. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption by Region (2018-2023) & (Units)

Table 15. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Forecast by Region (2024-2029) & (Units)

Table 16. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Manufacturer (2018-2023) & (USD Million)

Table 17. Production Value Market Share of Key Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Producers in 2022

Table 18. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Production by Manufacturer (2018-2023) & (Units)

Table 19. Production Market Share of Key Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Producers in 2022

Table 20. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Manufacturer (2018-2023) & (US\$/Unit)

Table 21. Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Company Evaluation Quadrant

Table 22. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Industry Rank of Major Manufacturers, Based on Production Value in 2022

Table 23. Head Office and Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Site of Key Manufacturer

Table 24. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market: Company Product Type Footprint

Table 25. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market: Company Product Application Footprint

Table 26. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Competitive Factors

Table 27. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) New Entrant and Capacity Expansion Plans

Table 28. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Mergers & Acquisitions Activity

Table 29. United States VS China Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Comparison, (2018 & 2022 & 2029) & (USD Million)

Table 30. United States VS China Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Comparison, (2018 & 2022 & 2029) & (Units)

Table 31. United States VS China Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Comparison, (2018 & 2022 & 2029) & (Units)

Table 32. United States Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers, Headquarters and Production Site (States, Country)

Table 33. United States Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value, (2018-2023) & (USD Million)

Table 34. United States Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share (2018-2023)

Table 35. United States Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2023) & (Units)

Table 36. United States Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share (2018-2023)

Table 37. China Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers, Headquarters and Production Site (Province, Country)

Table 38. China Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value, (2018-2023) & (USD Million)

Table 39. China Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share (2018-2023)

Table 40. China Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2023) & (Units)

Table 41. China Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share (2018-2023)

Table 42. Rest of World Based Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Manufacturers, Headquarters and Production Site (States, Country)

Table 43. Rest of World Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value, (2018-2023) & (USD Million)

Table 44. Rest of World Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share (2018-2023)

Table 45. Rest of World Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2023) & (Units)

Table 46. Rest of World Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share (2018-2023)

Table 47. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Type, (USD Million), 2018 & 2022 & 2029

Table 48. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Type (2018-2023) & (Units)

Table 49. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Type (2024-2029) & (Units)

Table 50. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Type (2018-2023) & (USD Million)

Table 51. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Type (2024-2029) & (USD Million)

Table 52. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Type (2018-2023) & (US\$/Unit)

Table 53. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Type (2024-2029) & (US\$/Unit)

Table 54. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Application, (USD Million), 2018 & 2022 & 2029

Table 55. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Application (2018-2023) & (Units)

Table 56. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production by Application (2024-2029) & (Units)

Table 57. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Production Value by Application (2018-2023) & (USD Million)

Table 58. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Production Value by Application (2024-2029) & (USD Million)

Table 59. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Average Price by Application (2018-2023) & (US\$/Unit)

Table 60. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Average Price by Application (2024-2029) & (US\$/Unit)

Table 61. Ams OSRAM AG Basic Information, Manufacturing Base and Competitors

Table 62. Ams OSRAM AG Major Business

Table 63. Ams OSRAM AG Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 64. Ams OSRAM AG Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 65. Ams OSRAM AG Recent Developments/Updates

Table 66. Ams OSRAM AG Competitive Strengths & Weaknesses

Table 67. Broadcom Basic Information, Manufacturing Base and Competitors

Table 68. Broadcom Major Business

Table 69. Broadcom Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 70. Broadcom Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 71. Broadcom Recent Developments/Updates

Table 72. Broadcom Competitive Strengths & Weaknesses

Table 73. II-VI Incorporated Basic Information, Manufacturing Base and Competitors

Table 74. II-VI Incorporated Major Business

Table 75. II-VI Incorporated Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 76. II-VI Incorporated Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 77. II-VI Incorporated Recent Developments/Updates

Table 78. II-VI Incorporated Competitive Strengths & Weaknesses

Table 79. Inneos LLC Basic Information, Manufacturing Base and Competitors

Table 80. Inneos LLC Major Business

Table 81. Inneos LLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 82. Inneos LLC Shortwave Infrared Vertical Cavity Surface Emitting Laser

(VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 83. Inneos LLC Recent Developments/Updates

Table 84. Inneos LLC Competitive Strengths & Weaknesses

Table 85. IQE PLC Basic Information, Manufacturing Base and Competitors

Table 86. IQE PLC Major Business

Table 87. IQE PLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 88. IQE PLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 89. IQE PLC Recent Developments/Updates

Table 90. IQE PLC Competitive Strengths & Weaknesses

Table 91. Leonardo Electronics Basic Information, Manufacturing Base and Competitors

Table 92. Leonardo Electronics Major Business

Table 93. Leonardo Electronics Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 94. Leonardo Electronics Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 95. Leonardo Electronics Recent Developments/Updates

Table 96. Leonardo Electronics Competitive Strengths & Weaknesses

Table 97. Lumentum Operations LLC Basic Information, Manufacturing Base and Competitors

Table 98. Lumentum Operations LLC Major Business

Table 99. Lumentum Operations LLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 100. Lumentum Operations LLC Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 101. Lumentum Operations LLC Recent Developments/Updates

Table 102. Lumentum Operations LLC Competitive Strengths & Weaknesses

Table 103. Teledyne FLIR Basic Information, Manufacturing Base and Competitors

Table 104. Teledyne FLIR Major Business

Table 105. Teledyne FLIR Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 106. Teledyne FLIR Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 107. Teledyne FLIR Recent Developments/Updates

Table 108. Teledyne FLIR Competitive Strengths & Weaknesses

Table 109. Trumpf Basic Information, Manufacturing Base and Competitors

Table 110. Trumpf Major Business

Table 111. Trumpf Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 112. Trumpf Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 113. Trumpf Recent Developments/Updates

Table 114. Trumpf Competitive Strengths & Weaknesses

Table 115. TT Electronics Basic Information, Manufacturing Base and Competitors

Table 116. TT Electronics Major Business

Table 117. TT Electronics Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 118. TT Electronics Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 119. TT Electronics Recent Developments/Updates

Table 120. TT Electronics Competitive Strengths & Weaknesses

Table 121. Vertilas GmbH Basic Information, Manufacturing Base and Competitors

Table 122. Vertilas GmbH Major Business

Table 123. Vertilas GmbH Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 124. Vertilas GmbH Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 125. Vertilas GmbH Recent Developments/Updates

Table 126. Vertilas GmbH Competitive Strengths & Weaknesses

Table 127. Vertilite Basic Information, Manufacturing Base and Competitors

Table 128. Vertilite Major Business

Table 129. Vertilite Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 130. Vertilite Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 131. Vertilite Recent Developments/Updates

Table 132. Artilux Basic Information, Manufacturing Base and Competitors

Table 133. Artilux Major Business

Table 134. Artilux Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Product and Services

Table 135. Artilux Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (Units), Price (US\$/Unit), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 136. Global Key Players of Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Upstream (Raw Materials)

Table 137. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Typical Customers

Table 138. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Typical Distributors

List Of Figures

LIST OF FIGURES

Figure 1. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Picture

Figure 2. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value: 2018 & 2022 & 2029, (USD Million)

Figure 3. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value and Forecast (2018-2029) & (USD Million)

Figure 4. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029) & (Units)

Figure 5. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price (2018-2029) & (US\$/Unit)

Figure 6. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share by Region (2018-2029)

Figure 7. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share by Region (2018-2029)

Figure 8. North America Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029) & (Units)

Figure 9. Europe Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029) & (Units)

Figure 10. China Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029) & (Units)

Figure 11. Japan Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029) & (Units)

Figure 12. South Korea Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production (2018-2029) & (Units)

Figure 13. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Market Drivers

Figure 14. Factors Affecting Demand

Figure 15. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029) & (Units)

Figure 16. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Market Share by Region (2018-2029)

Figure 17. United States Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029) & (Units)

Figure 18. China Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption (2018-2029) & (Units)

Figure 19. Europe Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Consumption (2018-2029) & (Units)

Figure 20. Japan Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Consumption (2018-2029) & (Units)

Figure 21. South Korea Shortwave Infrared Vertical Cavity Surface Emitting Laser

(VCSEL) Consumption (2018-2029) & (Units)

Figure 22. ASEAN Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Consumption (2018-2029) & (Units)

Figure 23. India Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL)

Consumption (2018-2029) & (Units)

Figure 24. Producer Shipments of Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) by Manufacturer Revenue (\$MM) and Market Share (%): 2022

Figure 25. Global Four-firm Concentration Ratios (CR4) for Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Markets in 2022

Figure 26. Global Four-firm Concentration Ratios (CR8) for Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Markets in 2022

Figure 27. United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share Comparison (2018 & 2022 & 2029)

Figure 28. United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share Comparison (2018 & 2022 & 2029)

Figure 29. United States VS China: Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Consumption Market Share Comparison (2018 & 2022 & 2029)

Figure 30. United States Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share 2022

Figure 31. China Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share 2022

Figure 32. Rest of World Based Manufacturers Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share 2022

Figure 33. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Type, (USD Million), 2018 & 2022 & 2029

Figure 34. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share by Type in 2022

Figure 35. Single-mode

Figure 36. Multi-mode

Figure 37. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share by Type (2018-2029)

Figure 38. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share by Type (2018-2029)

Figure 39. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Type (2018-2029) & (US\$/Unit)

Figure 40. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value by Application, (USD Million), 2018 & 2022 & 2029

Figure 41. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share by Application in 2022

Figure 42. Industrial

Figure 43. Electronics

Figure 44. Automotive

Figure 45. Medical

Figure 46. Others

Figure 47. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Market Share by Application (2018-2029)

Figure 48. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Production Value Market Share by Application (2018-2029)

Figure 49. World Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Average Price by Application (2018-2029) & (US\$/Unit)

Figure 50. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Industry Chain

Figure 51. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Procurement Model

Figure 52. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Sales Model

Figure 53. Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Sales Channels, Direct Sales, and Distribution

Figure 54. Methodology

Figure 55. Research Process and Data Source

I would like to order

Product name: Global Shortwave Infrared Vertical Cavity Surface Emitting Laser (VCSEL) Supply, Demand and Key Producers, 2023-2029

Product link: <https://marketpublishers.com/r/G4D2D3A23211EN.html>

Price: US\$ 4,480.00 (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/G4D2D3A23211EN.html>