

## **VCSEL Market: Global Industry Analysis, Trends, Market Size, and Forecasts up to 2032**

Market Report | 2025-05-30 | 350 pages | Infinium Global Research and Consulting Solutions

### **AVAILABLE LICENSES:**

- 1-5 User \$4795.00
- Enterprise \$7195.00

### **Report description:**

The report on the global VCSEL market provides qualitative and quantitative analysis for the period from 2022-2032. The global VCSEL market was valued at USD 1984.59 million in 2023 and is expected to reach USD 4203.76 million in 2032, with a CAGR of 8.85% during the forecast period 2024-2032. The study on VCSEL market covers the analysis of the leading geographies such as North America, Europe, Asia Pacific, and RoW for the period of 2022-2032.

The report on VCSEL market is a comprehensive study and presentation of drivers, restraints, opportunities, demand factors, market size, forecasts, and trends in the global VCSEL market over the period of 2022-2032. Moreover, the report is a collective presentation of primary and secondary research findings.

Porter's five forces model in the report provides insights into the competitive rivalry, supplier and buyer positions in the market and opportunities for the new entrants in the global VCSEL market over the period of 2022-2032. Further, IGR- Growth Matrix gave in the report brings an insight into the investment areas that existing or new market players can consider.

### **Report Findings**

#### **1) Drivers**

- Rising adoption of VCSEL in 3D sensing is propelling the expansion of the VCSEL market.
- The growth of autonomous vehicles is fostering the expansion of the VCSEL market.

#### **2) Restraints**

- High manufacturing and packaging costs are hampering the growth of the VCSEL market.

#### **3) Opportunities**

- Adoption of VCSEL in IoT devices is expected to create lucrative opportunities in the market in the coming years.

### **Research Methodology**

#### **A) Primary Research**

Our primary research involves extensive interviews and analysis of the opinions provided by the primary respondents. The primary research starts with identifying and approaching the primary respondents, the primary respondents are approached

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include

1. Key Opinion Leaders associated with Infinium Global Research
2. Internal and External subject matter experts
3. Professionals and participants from the industry

Our primary research respondents typically include

1. Executives working with leading companies in the market under review
2. Product/brand/marketing managers
3. CXO level executives
4. Regional/zonal/ country managers
5. Vice President level executives.

#### B) Secondary Research

Secondary research involves extensive exploring through the secondary sources of information available in both the public domain and paid sources. At Infinium Global Research, each research study is based on over 500 hours of secondary research accompanied by primary research. The information obtained through the secondary sources is validated through the crosscheck on various data sources.

The secondary sources of the data typically include

1. Company reports and publications
2. Government/institutional publications
3. Trade and associations journals
4. Databases such as WTO, OECD, World Bank, and among others.
5. Websites and publications by research agencies

#### Segment Covered

The global VCSEL market is segmented on the basis of type, wavelength, material, application, and end user.

#### The Global VCSEL Market by Type

- Single-mode
- Multi-mode

#### The Global VCSEL Market by Wavelength

- Red
- Near-Infrared
- Shortwave Infrared

#### The Global VCSEL Market by Material

- Gallium Arsenide
- Gallium Nitride

#### The Global VCSEL Market by Application

- 3D Sensing
- Data Communication
- LiDAR Systems
- Infrared Illuminations
- Industrial Heating & Laser Printing
- Others

#### The Global VCSEL Market by End User

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- Consumer Electronics
- Industrial
- Automotive
- Military & Defense
- Healthcare
- Others

#### Company Profiles

The companies covered in the report include

- Coherent Corp.
- Lumentum Operations LLC
- ams-OSRAM AG
- Santec Holdings Corporation
- Hamamatsu Photonics K.K.
- Broadcom Inc.
- Leonardo Electronics US Inc.
- TRUMPF SE + Co. KG
- Raysees / VCSEL
- Alight Technologies ApS

#### What does this Report Deliver?

1. Comprehensive analysis of the global as well as regional markets of the VCSEL market.
2. Complete coverage of all the segments in the VCSEL market to analyze the trends, developments in the global market and forecast of market size up to 2032.
3. Comprehensive analysis of the companies operating in the global VCSEL market. The company profile includes analysis of product portfolio, revenue, SWOT analysis and latest developments of the company.
4. IGR- Growth Matrix presents an analysis of the product segments and geographies that market players should focus to invest, consolidate, expand and/or diversify.

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