

# **VCSEL Market by Type (Single-Mode and Multimode VCSEL), and by Application (Data Communications, Infrared Illumination, Sensing, Pumping, GPS, and Others) - Global Opportunity Analysis and Industry Forecast, 2017-2023**

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## **Abstracts**

A vertical cavity surface emitting laser (VCSEL) is a specialized laser diode that emits a high-power optical beam vertically from its top surface. VCSEL is constructed in a way that emits energy at 850 nm to 1300 nm with transmission rate of 2.2 Gbps to 150 Gbps. At present, VCSEL are available in 2 types-single mode and multimode VCSELs. A single-mode VCSEL produces a light beam of high spectral purity, lower divergence, and high power of coherence than a multimode VCSEL.

Factors such as surge in demand of VCSEL in data communication, and rise in usage of VCSELs in infrared illumination owing to technological advancements are anticipated to fuel the market growth. There is a great potential for surge in demand of VCSELs in consumer electronics, which is expected to provide lucrative opportunity to the market. However, high cost and limitations in data range of VCSELs limits the market growth. The VCSEL market is segmented based on type, application, and region. By type, the market is divided into single mode and multimode VCSEL. By application, the market is classified into data communications, infrared illumination, sensing, pumping, GPS, and others. Based on regional study, the market is analyzed across North America, Europe, Asia-Pacific, and LAMEA.

The key players mentioned in the report are Finisar Corporation, Avago Technologies, JDS Uniphase Corporation, Royal Philips Electronics N.V., II-VI Incorporated, IQE PLC, Vertilas GmbH, Princeton Optronics, Vixar Inc., and Ultra Communications Inc.

## **KEY BENEFITS FOR STAKEHOLDERS**

This study comprises analytical depiction of the global VCSEL market with current trends and future estimations to depict the imminent investment pockets.

The overall market potential is determined to understand the profitable trends to gain a stronger coverage in the market.

The report presents information related to key drivers, restraints, and opportunities with a detailed impact analysis.

The current market is quantitatively analyzed from 2017 to 2023 to highlight the financial competency of the market.

Porter's Five Forces analysis illustrates the potency of the buyers and suppliers.

## **KEY MARKET SEGMENTS**

### **BY TYPE**

Single-Mode VCSEL

Multimode VCSEL

### **BY APPLICATION**

Data Communications

Infrared Illumination

Sensing

Pumping

GPS

Others

**BY REGION****North America**

U.S.

Canada

Mexico

**Europe**

UK

Germany

France

Rest of Europe

**Asia-Pacific**

China

Japan

India

Rest of Asia-Pacific

**LAMEA**

Latin America

Middle East

Africa

## KEY MARKET PLAYERS PROFILED

Finisar Corporation

Avago Technologies

JDS Uniphase Corporation

Royal Philips Electronics N.V.

II-VI Incorporated

IQE PLC

Vertilas GmbH

Princeton Optronics

Vixar Inc.

Ultra Communications Inc.

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