

Global Infrared LED Market: Market Segments: By Spectral Range (700nm-850nm, 850nm-940nm, 940nm-1020nm, 1020nm-1720nm); By Application (Biometrics, Imaging, Lighting, Remote Sensing, Surveillance); By Sector (Aerospace& Defense, Automotive, BFSI, Consumer Electronics, Education, Healthcare, Industrial, Retail); and Region – Analysis of Market Size, Share & Trends for 2014 – 2019 and Forecasts to 2030

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Abstracts

Product Overview

Infrared light-emitting diode refers to an SSL (solid-state lighting) mechanism that emits light in the electromagnetic radiation spectrum's infrared range. Instead of electric filaments, plasma and steam, the SSL mechanism utilises semiconductor illumination sources such as LEDs, PLEDs (Polymer Light-Emitting Diodes), and OLEDs (Organic Light-Emitting Diodes). IR LEDs are similar to a normal LED, but it is not possible to detect radiation from IR LEDs with the human eye. In addition, these LEDs allow inexpensive and efficient infrared light production and are widely used in various consumer electronics products, such as television remote controls and infrared cameras. By using aluminium gallium or arsenide gallium arsenide, IR LEDs are typically made. The IR LED illumination is the same as a regular LED. It is typically used to maintain wireless communication between two or more two devices in combination with the IR receiver.

Market Highlights

Global Infrared LED Market is expected to project a notable CAGR in 2030.

Global Infrared LED Market to surpass USD XXXX million by 2030 from USD XXXX million in 2018 at a CAGR of XX% throughout the forecast period, i.e. 2019-30. The rising trend for smart homes and smart offices in various developing nations has provided opportunities for the IR LED market players. The IR technology is experiencing a rising implementation in smart homes for remote control of TVs, music systems, and lightings, driving the market growth. Many macroeconomic factors such as rising per capita income, growing economy, employment rate, and rapid rate of industrialization and urbanization are driving the global infrared lighting module market.

Global Infrared LED Market: Segments

850nm-950nm Segment to grow with the highest CAGR during 2019-30

Global Infrared LED Market is segmented by Spectral Range into 700nm-850nm, 850nm-940nm, 940nm-1020nm, and 1020nm-1720nm. The greater market share in 2018 was accounted for by 850nm-950nm segment and is expected to see the highest growth during the forecast period. The growth is mainly due to its growing adoption for night vision, gesture recognition, among others, in the automotive industry. In developing countries, growing concern about road safety has led many car manufacturers to deploy advanced electronic systems in vehicles. This will improve the integration of 950nm-1,020 nm infrared LEDs and have a positive influence on the market demand.

Biometric Segment to grow with the highest CAGR during 2019-30

Global Infrared LED Market is segmented by application into Application into Biometrics, Imaging, Lighting, Remote Sensing, and Surveillance. The greater market share in 2018 was accounted for by the biometric segment and the trend is estimated to continue over the forecast period. The increasing implementation of face recognition and iris recognition biometrics in smartphones and security systems creates high opportunities for infrared LEDs to expand. The deployment of biometric applications has been increased by the growing acceptance of digital banking and mobile payment services. These LEDs provide customers with high reliability and safety authentication to conduct digital transactions, creating high growth opportunities over the coming years.

Global Infrared LED Market: Market Dynamics

Drivers

Huge increase in the adoption of security cameras

IR receivers and IR LEDs will operate together as IR sensors, which also notes that the overall price of such shaped sensors would be influenced by the increase or decrease in the individual prices of IR receivers and IR LEDs. In the recent past, the price of IR receivers has decreased, which has subsequently increased the market for general IR

sensors, including IR LEDs. Increased use of IR sensors in many industries, including aerospace and defence, oil and gas, chemical-mining, and pharmaceutical, is a key factor accelerating the global demand for IR LEDs. The market for photodiodes and phototransistors is expected to report substantial growth over the next few years, with the growing acceptance of sensor-based technologies in the automotive sector, resulting in higher demand for IR LEDs.

Growing demand in consumer electronic devices

The growth of the global market for infrared lighting modules is driven by the rising market for consumer electronics and the increasing demand for infrared lighting modules in industries such as bio-suppliers, electronics, automobiles, and other equipment. The benefits of the infrared lighting module include easy implementation of the design, relatively low power requirements, few international regulatory restrictions, high noise immunity, and higher safety fueling the demand over the forecast period for the global market for infrared lighting module.

Restrain

High implementation and maintenance cost of structured products

Some of the drawbacks can obstruct transmissions, such as low speed than standard RF and wired transmission, weather and light-sensitive, short-range, materials such as plants, walls, people, and other objects, and line of sight leads to restricting the worldwide market for infrared lighting modules. However, as the demand for sensors in smartphones and tablets is experiencing saturation, the IR Driven demand is also observing minor saturation, in terms of advanced technologies & designs, which is expected to restrict the market growth.

Global Infrared LED Market: Key Players

NICHIA CORPORATION

Company Overview

Business Strategy

Key Product Offerings

Financial Performance

Key Performance Indicators

Risk Analysis

Recent Development

Regional Presence

SWOT Analysis

Kingbright Electronic Co., Ltd.

OSRAM Opto Semiconductors GmbH

Epistar Corporation
Everlight Electronics Co. Ltd.
High Power Lighting Corporation
EPILEDs Co. Ltd.
ON Semiconducts
Koninklijke Philips N.V.

Lextar Electronics Corporation
Global Infrared LED Market: Regions

Global Infrared LED Market is segmented based on regional analysis into five major regions. These include North America, Latin America, Europe, APAC, and MENA.

Global Infrared LED Market in Asia Pacific held the largest market share of XX.X% in the year 2018 and the market growth can be majorly credited to the rising consumer electronics sector in countries such as China, India, South Korea, and Taiwan. Some of the factors driving the consumer electronics market are changing consumer lifestyles and growing demand for more advanced electronics.

Competitive Landscape:

The Global Infrared LED market, which is highly competitive, consists of several major players such as NICHIA CORPORATION, Kingbright Electronic Co., Ltd. hold a substantial market share in the Global Infrared LED market. Other players analyzed in this report are OSRAM Opto Semiconductors GmbH, Epistar Corporation, Everlight Electronics Co. Ltd., High Power Lighting Corporation, EPILEDs Co. Ltd., ON Semiconducts, Koninklijke Philips N.V., Lextar Electronics Corporation, among others

Recently, various developments have been taking place in the market. For instance, For instance, in June 2017, Osram launched the smallest side-looking infrared LED which has a wavelength of 850 nm which is used for eye tracking applications in virtual reality (VR) and augmented reality (AR) headsets. Both AR and VR systems react to the eye and head movement making the infrared LED the critical component of the headset designs.

Global Infrared LED Market is further segmented by region into:

North America Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – United States and Canada

Latin America Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – Mexico, Argentina, Brazil, and Rest of Latin America

Europe Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – United Kingdom, France, Germany, Italy, Spain, Belgium, Hungary, Luxembourg, Netherlands,

Poland, NORDIC, Russia, Turkey, and Rest of Europe

APAC Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – India, China, South Korea, Japan, Malaysia, Indonesia, New Zealand, Australia, and Rest of APAC

MENA Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – North Africa, Israel, GCC, South Africa, and Rest of MENA

Global Infrared LED Market report also contains analysis on:

Global Infrared LED Market Segments:

By Spectral Range:

700nm-850nm

850nm-950nm

950nm-1020nm

1020nm-1720nm

By Application:

Biometrics

Imaging

Lighting

Remote sensing

Surveillance

By Sector:

Aerospace & defense

Automotive

BFSI

Consumer electronics

Education

Healthcare

Industrial

Retail

Infrared LED Market Dynamics

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4. EVERLIGHT ELECTRONICS CO. LTD.

5. HIGH POWER LIGHTING CORPORATION

6. EPILEDs CO. LTD.

7. ON SEMICONDUCTS

8. KONINKLIJKE PHILIPS N.V.

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Consultant Recommendation

**The above-given segmentations and companies could be subjected to further modification based on in-depth feasibility studies conducted for the final deliverable.

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