

# **Optoelectronic Components –** 2018

Jamie Fox, Principal Analyst Publishing End of June 2018

# What does the market for optoelectronic components look like in the next 5 years?

This document outlines the proposed scope for the latest edition of the IHS Markit report on the market for optoelectronic components, which IHS Markit has covered for 28 years.

In past years, significant changes have been seen in the technology development and market growth of optoelectronic components. This is not only driven by the increasing size of the market but also by the the introduction of new practical applications. In the next five years, this situation will continue. For example, the introduction of micro-LEDs that will change demand for LEDs, or mobile phones with biometrics that can be the next opportunity for infrared LED components.

In order to have a deep understanding of this market and its trends, IHS Markit presents the optoelectronic components report for 2018. This report will provide a detailed quantitative analysis of the global market for optoelectronic components, including LEDs, optocouplers, wireless infrared components, optical switches (also known as photo interrupters) and LED displays. For each type of optoelectronic component, the market will be analyzed in terms of application, region and feature historical and current market shares.

This report allows users to gain a better market understanding to make more informed business decisions, identify growth opportunities, understand the trends within the market, identify investment opportunities and compare company performance in a number of key end markets.

#### Key Issues Addressed

- What are the key drivers for the optoelectronic components market in the next five years?
- What is the current size of the optoelectronic components market and how will this change for each product type over the next five years?
- Who are the leading suppliers of each component type? Which suppliers lost and gained share?
- Will new applications bring additional opportunities to the market?
- How is the market for highperformance optocouplers evolving with growing competition from nonoptical isolators?

#### Applicable To

- Marketing
- $\circ$  Directors
- Managers
- Strategic Marketing
- Corporate
- Executives
- Investor Relations
- Research & Development
- Engineers
- Financial
- Business Development
- Sales Executives
- $\circ$  Investors

# ACTUALS AND FORECAST

#### Frequency, Time Period

- Base year/ actuals (2017)
- 5-year annual forecast (2018 2023)

#### Measures

- Revenues (USD \$M)
- Units (millions)
- Average Selling Price (\$)

#### Regions

- Western Europe
- Eastern Europe
- Middle East & Africa
- North America
- Latin America
- Greater China (includes Taiwan)
- Japan
- Rest of Asia Pacific

# PRODUCTS COVERED

LED (visible)

InGaN/GaN AllnGaP Standard

- Optocouplers & Photo Relays

Phototriacs/SCRs Phototransistors Photodiode Photodarlington High Performance Photo Relays Non-Optical Isolators

- Wireless Infrared
  Infrared LEDs
  Photodiodes & Phototransistors
  IrDA Transceivers
  IR Receivers
- Optical Switches
- LED displays
- UV LEDs



# **REPORT CONTENT**

Note: The research will provide detailed information on the subjects listed here. However, the final scope may change slightly, and therefore other issues may also be addressed. Components considered are packaged products, not bare die.

## LEDs

The LED section of the report contains the most detailed market shares by application, product type and region, as well as the most data overall. It is the largest of the markets covered (as revenue).

This year's report will contain additional breakouts of package type within the lighting sector (e.g. 2835/5630/3030) as well as tables showing regional breakout on a design-in basis.

## Optocouplers

The market for optocouplers is segmented by region and application. In this market, areas such as factory automation, motor drives and power suppliers are more important, and are therefore quantified. Key global trends and market share information for leading suppliers will be provided.

The section for optocouplers is broken down into "standard" photo SCRs, phototriacs, phototransistors, photodiode, photodarlington, "high speed," IGBT gate drivers, and solid state relays (also known as photo relays). It also shows the revenue and unit shipments for non-optical isolation components.

# **Infrared Components**

The market for infrared components has been strong in both industrial/security applications (such as light curtains and CCTV cameras) and consumer applications (such as set-top boxes and TVs) for many years. However with the introduction of new applications such as iris identification, many new opportunities are expected.

This report will analyse the sub-market of each application for each infrared component type. Sub-markets are automotive, telecommunications, computer and office, consumer, military and aerospace, industrial, medical and security.

Infrared components covered are infrared LEDs, photodiode/phototransistors, IrDA transceivers and infrared receivers.

# **Optical Switches (also known as photo interrupters)**

The market for optical switches will also be covered in this report. The shorter section on optical switches will include market forecasts for each sector and geographical region as described in the other components above.

## LED display

This report includes a concise market analysis for visible LED displays. It covers two types of LED displays: dumb and intelligent displays. The unit shipment and revenue numbers of each LED display type will be segmented by application and geographic region.

## UV LEDs

Ulraviolet LEDs will be added to the report. This will be a small section showing the total market size and a supplier ranking but not information by application or other detailed quantitative segmentation.

# EXAMPLE TABLES

The base year is 2017 and is built on reported data. Market forecasts will be presented for the period 2018 to 2023.

There are approximately 120 tables in this report, including market share tables. Two examples are shown below. Companies considering purchasing this report may request sample tables that show all of tables in the report (without data).

Product		2017	2018	2019	2020	2021	2022	2023	CAGI 17–2
LEDs	Revenues (\$M) Units (millions) ASP (\$)								
Optocouplers & Photo Relays	Revenues (\$M) Units (millions) ASP (\$)								
Infrared Components	Revenues (\$M) Units (millions) ASP (\$)								
Optical Switches	Revenues (\$M) Units (millions) ASP (\$)								
LED Displays	Revenues (\$M) Units (millions) ASP (\$)								
Total	Revenues (\$M) Units (millions) ASP (\$)								

Revenue by product type (\$ millions	5)							
Product	2017	2018	2019	2020	2021	2022	2023	CAGR 17–23
LEDs								-
Standard								
InGaN/GaN								
AllnGaP								
Optocouplers								
PhotoSCRs/Phototriacs								
Phototransistor								
Photodiode								
Photodarlington								
High speed								
Gate driver								
Photo relays								
Infrared components								
Infrared LEDs								
Photodiodes/Phototransistors								
IrDA transceivers IR receivers								
Optical switches								
LED displays								
Total								
Growth Rate								

#### LEAD ANALYST

# Jamie Fox, Principal Analyst Lighting & LEDs

Jamie worked for IMS Research from 2006 to its acquisition by IHS Markit in 2012. Jamie worked for many years in the UK but currently lives in Chile (for family reasons). Jamie first worked on the optoelectronics components report in 2007 as a junior analyst, before producing the report as the lead analyst in 2008. Since then, Jamie has either analyst that wrote the report numerous times, most recently in 2016.

Jamie speaks to the leading opto companies at least once a year for research, as well as collecting data in excel questionnaires.

Jamie carries out 90% of the work for this report, and is supported by a network of analysts in Asia Pacific that each dedicate a small amount of their time to support with obtaining contacts in Asia, carrying out interviews, and translating fiscal and media reports.

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# ABOUT IHS MARKIT OPTOELECTRONIC COVERAGE

IHS is the leading provider of market intelligence for optoelectronic components. This is believed to be the only industry reports that covers these products in such depth. IHS Markit has covered optoelectronic components since 1990.

Having produced research in these areas for 28 years, IHS has built up strong relationships with the majority of the top manufacturers.

# **RESEARCH METHODOLOGY**



# **REPORT PROCESS & TIMESCALES**

Report process	Timescales		
Collect Questionnaires from Suppliers	Mar - Apr 2018		
Conduct Interviews & Perform Secondary Research	Mar - May 2018		
Develop Report	May 2018		
Preliminary Data	Jun 2018		
Publish Report	End Jun 2018		

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## About IHS Markit

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