

# Optoelectronic Components Report - 2022

Part of the Semiconductor Components Service Area Package

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

This report provides 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 is 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 decisions, identify growth opportunities, identify investment opportunities and compare company performance in a number of key end markets.

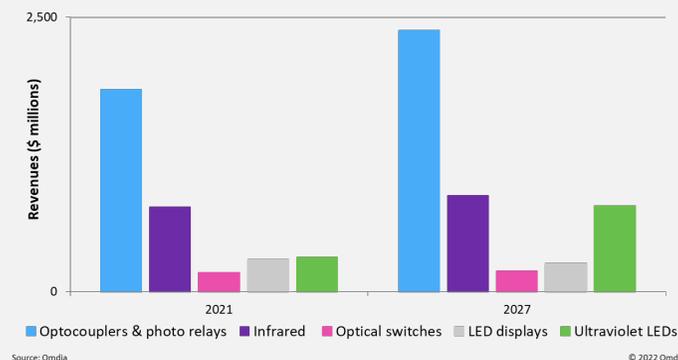
This year's report provides the reliable and accurate coverage that customers are used to, with data by region, application, and product type, as well as market shares. The report includes the usual quantitative data provided in the past. In addition, the report research covers upcoming changes and trends in the report, adding to the report content as needed to cover these trends.

The report is based on very detailed data provided by leading suppliers in the form of surveys from customer sales and telephone interviews. Each year, the report's coverage is enhanced by adding to the core data as the market changes and customers needs adapt.

Clients of this report will receive:

- **Optoelectronic Components Report:** Comprehensive discussion on each of the optoelectronic components covered and accompanied by analyst recommendations and key predictions.
- **Optoelectronic Components Excel Tables:** Offers detailed revenue market share analysis of each optoelectronic components by region, application, product type, and supplier.

Figure 1 - Optoelectronic components by product type  
Relative market sizes – 2021 versus 2027



# Report Coverage

KEY ISSUES ADDRESSED	COVERAGE	APPLICABLE TO
<ul style="list-style-type: none"> <li>• What are the key drivers for the optoelectronic components market in the next five years?</li> <li>• What is the current size of the optoelectronic components market and how will this change for each product type over the next five years?</li> <li>• Who are the leading suppliers of each component type? Which suppliers lost and gained share?</li> <li>• Will new applications bring additional opportunities to the market?</li> <li>• How is the market for high-performance optocouplers evolving with growing competition from non-optical isolators?</li> </ul>	<p><b>Frequency:</b> Annual</p> <p><b>Time Period</b></p> <ul style="list-style-type: none"> <li>• Base year/ actuals (2021)</li> <li>• 5-year annual forecast (2022 - 2027)</li> </ul> <p><b>Measures</b></p> <ul style="list-style-type: none"> <li>• Revenues</li> <li>• Unit shipments</li> <li>• Average Selling Price</li> <li>• Market shares</li> </ul> <p><b>Regions</b></p> <ul style="list-style-type: none"> <li>• Western Europe</li> <li>• Eastern Europe</li> <li>• Middle East &amp; Africa</li> <li>• North America</li> <li>• Latin America</li> <li>• Greater China (includes Taiwan)</li> <li>• Japan</li> <li>• Rest of Asia &amp; Oceania</li> </ul>	<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>• Lighting</li> <li>• TVs</li> <li>• Monitors</li> <li>• Notebook</li> <li>• Tablets</li> <li>• Mobile</li> <li>• Automotive Interior</li> <li>• Automotive Exterior</li> <li>• Signage</li> </ul> <p><b>PRODUCTS COVERED</b></p> <p><b>LEDs</b></p> <ul style="list-style-type: none"> <li>• InGaN/GaN</li> <li>• AllInGaP</li> <li>• Standard</li> </ul> <p><b>Optocouplers &amp; Photo Relays</b></p> <ul style="list-style-type: none"> <li>• Phototriacs/SCRs</li> <li>• Phototransistors</li> <li>• Photodiode</li> <li>• Photodarlington</li> <li>• High Performance</li> <li>• Photo Relays</li> <li>• Non-Optical Isolators</li> </ul> <p><b>Wireless Infrared</b></p> <ul style="list-style-type: none"> <li>• Infrared LEDs</li> <li>• Photodiodes &amp; Phototransistors</li> <li>• IrDA Transceivers</li> <li>• IR Receivers</li> </ul> <p><b>Optical Switches</b></p> <p><b>LED Display</b></p> <p><b>UV LEDs</b></p>
		<ul style="list-style-type: none"> <li>• <b>Marketing</b> <ul style="list-style-type: none"> <li>• Directors</li> <li>• Managers</li> <li>• Strategic Marketing</li> </ul> </li> <li>• <b>Corporate</b> <ul style="list-style-type: none"> <li>• Executives</li> <li>• Investor Relations</li> </ul> </li> <li>• <b>Research &amp; Development</b></li> <li>• <b>Engineers</b></li> <li>• <b>Financial</b> <ul style="list-style-type: none"> <li>• Business Development</li> <li>• Sales Executives</li> <li>• Investors</li> </ul> </li> </ul>

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# Report Coverage

*Note: 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 contains all the same tables shown in the past on core markets such as backlighting, lighting and automotive. In addition, the market size for new areas such as micro LED (and mini LED) in signage, as well as horticulture, has been added.

## Optocouplers

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 are 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 and 3D Face, new opportunities have arrived.

This report analyses 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. (IrDA transceivers have been at a very low level for some years and are not a major focus of the report.)

## Optical Switches (also known as photo interrupters)

The market for optical switches is also covered in this report. The shorter section on optical switches includes 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 is segmented by application and geographic region.

## UV LEDs

Ultraviolet LEDs is included in the report, but as a very small section. This is a small section showing the total market size and a supplier ranking but not information by application or other detailed quantitative segmentation.

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# Example Tables

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).

**Table 2.1 - The world market for optoelectronic components**

By product type (millions of \$, millions of units, and average selling price)

Product		2021	2022	2023	2024	2025	2026	2027	CAGR 2021–27
LEDs	Revenue (\$m)								
	Units (billions)								
	ASP (\$)								
Optocouplers & photo relays	Revenue (\$m)								
	Units (billions)								
	ASP (\$)								
Infrared	Revenue (\$m)								
	Units (billions)								
	ASP (\$)								
Optical switches	Revenue (\$m)								
	Units (billions)								
	ASP (\$)								
LED displays	Revenue (\$m)								
	Units (billions)								
	ASP (\$)								
Ultraviolet LEDs	Revenue (\$m)								
	Units (billions)								
	ASP (\$)								
<b>Total</b>	<b>Revenue (\$m)</b>								
	<b>Units (billions)</b>								
	<b>ASP (\$)</b>								

Source: Omdia

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# Example Tables

Table 2.2 - The world market for optoelectronic components

Revenue by product type (\$m)

Product	2021	2022	2023	2024	2025	2026	2027	CAGR 2021–27
<b>Visible LEDs</b>								
InGaN/GaN								
AllInGaP								
Other								
<b>Optocouplers &amp; photo relays</b>								
PhotoSCRs/phototriacs								
Phototransistor								
Photodiode								
Photodarlington								
High speed								
Gate driver								
Photo relays								
<b>Infrared components</b>								
Infrared LEDs								
Photodiodes/phototransistors								
IrDA transceivers								
IR receivers								
<b>Optical switches</b>								
<b>LED displays</b>								
<b>Ultraviolet LEDs</b>								
<b>Total</b>								
<b>Growth rate</b>								

Source: Omdia

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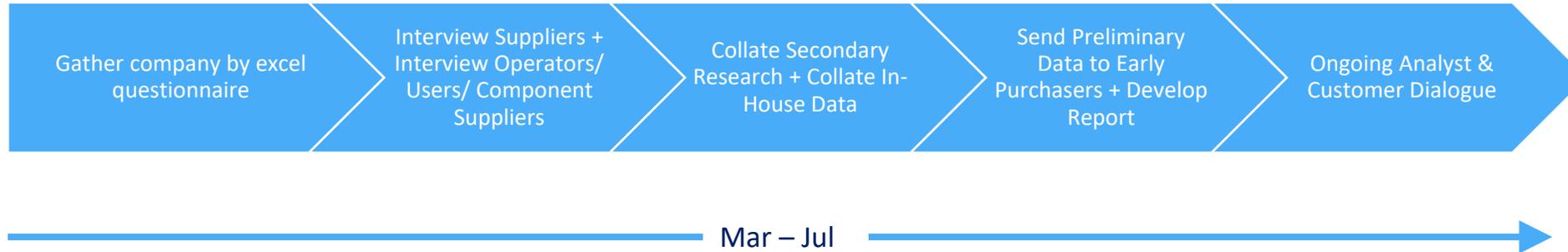
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# Research Methodology



## REPORT PROCESS & TIMESCALES

Report process	Timescales
Collect Questionnaires from Suppliers	Mar - Apr 2022
Conduct Interviews & Perform Secondary Research	Mar – May 2022
Develop Report	May 2022
Preliminary Data	Jun 2022
Publish Report	Jul 2022

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