

### Light Fidelity Market Size, Share, & Trends Analysis Report By Component (LED, Photodetector), By Enduse (Automotive, Retail, Government), By Region, And Segment Forecasts, 2023 - 2030

https://marketpublishers.com/r/LABD5ED0273DEN.html

Date: February 2023

Pages: 110

Price: US\$ 4,950.00 (Single User License)

ID: LABD5ED0273DEN

#### **Abstracts**

This report can be delivered to the clients within 4 Business Days

Light Fidelity Market Growth & Trends

The global light fidelity market size is expected to reach USD 7,757.3 million by 2030, growing at a CAGR of 51.0% from 2023 to 2030, according to a new report by Grand View Research, Inc. The growth of the Light Fidelity (Li-Fi) market can be attributed to the factors such as high-speed data transfer, high security, energy efficiency, no spectrum shortage, and no interference with radio frequency RF spectrum.

Li-Fi is a wireless communication technology that uses the visible light spectrum to transmit data. Li-Fi uses light waves that cannot penetrate walls like radio frequency waves used in Wi-Fi. This makes Li-Fi more secure, as it is difficult to intercept the data transmitted through Li-Fi. Additionally, as the number of network users increases, the RF spectrum is likely to get crowded, lowering the speed of Wi-Fi. Li-Fi eliminates this issue by leveraging the visible light spectrum instead of the RF spectrum, propelling its adoption.

Li-Fi uses LED lights to transmit the data through their modulation. Since LEDs are already widely used in lighting, Li-Fi can be integrated with the existing infrastructure without requiring additional energy consumption, making them an energy-efficient option. Moreover, it has the potential to transmit data at extremely high speeds, up to several gigabits per second, which is much faster than traditional Wi-Fi. This makes Li-



Fi a faster and more reliable option, expected to drive the market's growth over the forecast period.

Since Li-Fi uses light signals, it can only travel within the line of sight of the light source, limiting the range. It also means that Li-Fi signals cannot travel through windows. Hence, end-users must install individual Li-Fi systems over several places to cover the whole area. Moreover, Li-Fi technology is not currently compatible with existing devices such as smartphones and laptops, so additional hardware is required to access Li-Fi. These disadvantages can prove to be a hindrance to the market's growth.

#### Light Fidelity Market Report Highlights

The LED segment is expected to witness significant growth over the forecast period. LEDs can be rapidly switched to ON and OFF states to create a digital signal, which is driving their adoption in the manufacturing of Li-Fi. Additionally, they are highly energy efficient, are cheaper in costs, have a longer lifespan, and are compatible with the existing lighting infrastructure, thus driving the segment's growth

The healthcare segment is expected to witness significant growth over the forecast period. Li-Fi provides multiple benefits in the healthcare industry including higher speed, improved security, reduced interference, and energy efficiency. Additionally, since it does not use RF spectrum, it reduces radio frequency pollution in hospitals, which is driving the adoption of Li-Fi in hospitals, thereby propelling the segment's growth

Asia Pacific is anticipated register significant growth over the forecast period. The regional growth can be contributed by a broader customer base and a substantial number of Li-Fi providers in the region. Encouraging government initiatives for digitization and adoption of Li-Fi also bode well for the market's growth



#### **Contents**

#### **CHAPTER 1. METHODOLOGY AND SCOPE**

- 1.1. Market Segmentation & Scope
- 1.2. Market Definitions
- 1.3. Information Procurement
- 1.4. Information Analysis
- 1.4.1. Market Formulation & Data Visualization
- 1.4.2. Data Validation & Publishing
- 1.5. Research Scope and Assumptions
- 1.6. List of Data Sources

#### **CHAPTER 2. EXECUTIVE SUMMARY**

- 2.1. Market Outlook
- 2.2. Segmental Outlook
- 2.3. Competitive Landscape Snapshot

#### **CHAPTER 3. MARKET VARIABLES, TRENDS, AND SCOPE**

- 3.1. Market Lineage Outlook
- 3.2. Industry Value Chain Analysis
  - 3.2.1. Raw Material Outlook
  - 3.2.2. Manufacturing & Technology Trends
- 3.3. Market Dynamics
  - 3.3.1. Market Driver Impact Analysis
  - 3.3.2. Market Restraint Impact Analysis
  - 3.3.3. Market Opportunity Impact Analysis
- 3.4. Impact of COVID-19 Pandemic
- 3.5. Industry Analysis Tools
  - 3.5.1. Porter's Analysis
  - 3.5.2. PESTEL Analysis
- 3.6. Comparative Analysis: Li-Fi Vs Wi-Fi
- 3.7. Li-Fi Market: Pricing Analysis

# CHAPTER 4. LIGHT FIDELITY (LI-FI) MARKET: COMPONENT ESTIMATES & TREND ANALYSIS



- 4.1. Component Movement Analysis & Market Share, 2022 & 2030
- 4.2. Light Fidelity (Li-Fi) Market Estimates & Forecast, By Component
  - 4.2.1. LED
  - 4.2.2. Photodetectors
  - 4.2.3. Microcontrollers
  - 4.2.4. Others (Antenna, and Wireless Communication Module)

### CHAPTER 5. LIGHT FIDELITY (LI-FI) MARKET: END-USE ESTIMATES & TREND ANALYSIS

- 5.1. End-use Movement Analysis & Market Share, 2022 & 2030
- 5.2. Li-Fi Market Estimates & Forecast, By End-use
  - 5.2.1. Automotive
  - 5.2.2. Retail
  - 5.2.3. Healthcare
  - 5.2.4. Aerospace & Defense
  - 5.2.5. Government
  - 5.2.6. Transportation
  - 5.2.7. Education
  - 5.2.8. Others (Consumer Electronics, Mining, Oil & Gas, BFSI)

## CHAPTER 6. LIGHT FIDELITY (LI-FI) MARKET: REGIONAL ESTIMATES & TREND ANALYSIS

- 6.1. Light Fidelity (Li-Fi) Market: Regional Outlook
- 6.2. North America
- 6.2.1. North America Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.2.2. U.S.
- 6.2.2.1. U.S. Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.2.3. Canada
- 6.2.3.1. Canada Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- 6.3. Europe
- 6.3.1. Europe Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.3.2. U.K.
    - 6.3.2.1. U.K. Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD



#### Million)

- 6.3.3. Germany
- 6.3.3.1. Germany Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.3.4. France
- 6.3.4.1. Germany Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.3.5. Italy
- 6.3.5.1. Germany Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- 6.4. Asia Pacific
- 6.4.1. Asia Pacific Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.4.2. China
- 6.4.2.1. China Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.4.3. India
- 6.4.3.1. India Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.4.4. Japan
- 6.4.4.1. Japan Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.4.5. Australia
- 6.4.5.1. Australia Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- 6.5. Latin America
- 6.5.1. Latin America Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
  - 6.5.2. Brazil
- 6.5.2.1. Brazil Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- 6.6. MEA
- 6.6.1. MEA Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)

#### **CHAPTER 7. COMPETITIVE LANDSCAPE**

- 7.1. Company Categorization
- 7.2. Participant's Overview



- 7.2.1 PureLiFi
- 7.2.2 Oledcomm
- 7.2.3 Signify Holding.
- 7.2.4 VLNComm
- 7.2.5 Velmenni
- 7.2.6 Wipro Lighting
- 7.2.7 LiFiComm
- 7.2.8 Lucibel
- 7.2.9 Zero1
- 7.2.10 Panasonic
- 7.3. Financial Performance
- 7.4. Product Benchmarking
- 7.5. Company Market Positioning
- 7.6. Company Market Share Analysis, 2022
- 7.7. Company Heat Map Analysis
- 7.8. Strategy Mapping
  - 7.8.1. Expansion
  - 7.8.2. Collaborations
  - 7.8.3. Mergers & Acquisitions
  - 7.8.4. New Product Launches
  - 7.8.5. Partnerships
  - 7.8.6. Others



#### **List Of Tables**

#### LIST OF TABLES

- Table 1. Global Light Fidelity (Li-Fi) Market, by component, 2017 2030 (USD Million)
- Table 2. Global Light Fidelity (Li-Fi) Market, by end-use, 2017 2030 (USD Million)
- Table 3. Company Market Share, 2022
- Table 4. Company Heat Map Analysis
- Table 5. Key companies undergoing expansion
- Table 6. Key companies undergoing collaborations
- Table 7. Key companies undergoing new product launch
- Table 8. Key companies undergoing mergers & acquisitions
- Table 9. Key companies undergoing other strategies



### **List Of Figures**

#### **LIST OF FIGURES**

- Fig. 1. Li-Fi Market Segmentation
- Fig. 2. Information Procurement
- Fig. 3. Data Analysis Models
- Fig. 4. Market Formulation and Validation
- Fig. 5. Data Validating & Publishing
- Fig. 6. Market Snapshot
- Fig. 7. Segment Snapshot
- Fig. 8. Competitive Landscape Snapshot
- Fig. 9. Parent Market Value, 2022 (USD Billion)
- Fig. 10. Light Fidelity (Li-Fi) Market Industry Value Chain Analysis
- Fig. 11. Light Fidelity (Li-Fi) Market Dynamics
- Fig. 12. Light Fidelity (Li-Fi) Market: PORTER's Analysis
- Fig. 13. Light Fidelity (Li-Fi) Market: PESTEL Analysis
- Fig. 14. Light Fidelity (Li-Fi) Market, by Component: Key Takeaways
- Fig. 15. Light Fidelity (Li-Fi) Market, by Component: Market Share, 2022 & 2030
- Fig. 16. Light Fidelity (Li-Fi) market estimates & forecasts, by LED, 2017 2030 (USD Million)
- Fig. 17. Light Fidelity (Li-Fi) market estimates & forecasts, by Photodetector, 2017 2030 (USD Million)
- Fig. 18. Light Fidelity (Li-Fi) market estimates & forecasts, by Microcontrollers, 2017 2030 (USD Million)
- Fig. 19. Light Fidelity (Li-Fi) market estimates & forecasts, by Others, 2017 2030 (USD Million)
- Fig. 20. Light Fidelity (Li-Fi) Market, by End-use: Key Takeaways
- Fig. 21. Light Fidelity (Li-Fi) Market, by End-use: Market Share, 2022 & 2030
- Fig. 22. Light Fidelity (Li-Fi) market estimates & forecasts, by Automotive, 2017 2030 (USD Million)
- Fig. 23. Light Fidelity (Li-Fi) market estimates & forecasts, by Retail, 2017 2030 (USD Million)
- Fig. 24. Light Fidelity (Li-Fi) market estimates & forecasts, by Healthcare, 2017 2030 (USD Million)
- Fig. 25. Light Fidelity (Li-Fi) market estimates & forecasts, by Aerospace & Defense, 2017 2030 (USD Million)
- Fig. 26. Light Fidelity (Li-Fi) market estimates & forecasts, by Government, 2017 2030 (USD Million)



- Fig. 27. Light Fidelity (Li-Fi) market estimates & forecasts, by Transportation, 2017 2030 (USD Million)
- Fig. 28. Light Fidelity (Li-Fi) market estimates & forecasts, by Education, 2017 2030 (USD Million)
- Fig. 29. Light Fidelity (Li-Fi) market estimates & forecasts, by Others, 2017 2030 (USD Million)
- Fig. 30. Light Fidelity (Li-Fi) market revenue, by region, 2022 & 2030 (USD Million)
- Fig. 31. Regional marketplace: Key takeaways
- Fig. 32. North America Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 33. U.S. Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 34. Canada Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 35. Europe Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 36. U.K. Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 37. Germany Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 38. France Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 39. Italy Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 40. Asia Pacific Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 41. China Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 42. India Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 43. Japan Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 44. Australia Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 45. Latin America Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 46. Brazil Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD Million)
- Fig. 47. MEA Light Fidelity (Li-Fi) market estimates & forecasts, 2017 2030 (USD



#### Million)

Fig. 48. Key Company Categorization

Fig. 49. Company Market Positioning

Fig. 50. Company Market Share Analysis, 2022

Fig. 51. Strategic Framework



#### I would like to order

Product name: Light Fidelity Market Size, Share, & Trends Analysis Report By Component (LED,

Photodetector), By End-use (Automotive, Retail, Government), By Region, And Segment

Forecasts, 2023 - 2030

Product link: <a href="https://marketpublishers.com/r/LABD5ED0273DEN.html">https://marketpublishers.com/r/LABD5ED0273DEN.html</a>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

#### **Payment**

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/LABD5ED0273DEN.html">https://marketpublishers.com/r/LABD5ED0273DEN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

To place an order via fax simply print this form, fill in the information below



and fax the completed form to +44 20 7900 3970