

# **US Biophotonics Market Size study, by End User (Medical Diagnostics, Medical Therapeutic, Tests & Components, Nonmedical Application) by Application (See-through Imaging, Inside Imaging, Spectro Molecular, Surface Imaging, Microscopy, Light Therapy, Analytical Sensing, Biosensors) Forecasts 2022-2032**

<https://marketpublishers.com/r/U235AC735625EN.html>

Date: June 2024

Pages: 200

Price: US\$ 3,218.00 (Single User License)

ID: U235AC735625EN

## **Abstracts**

US Biophotonics Market is valued approximately USD 18.50 Billion in 2023 and is anticipated to grow with a healthy growth rate of more than 10.86% over the forecast period 2024-2032. Biophotonics is the study of creating and operating light in order to see, identify, and alter biological elements. In order to comprehend how living things' internal tissues and cell's function, light and other radiant energy sources are used. The study of molecular structures, functions, and processes is done in biology using biophotonics. Light-tissue interactions at the micro, nano, and macro-organism level are studied in medicine to identify, characterize, and treat illnesses. Furthermore, radiation from bimolecular, cells, tissues, organisms, and biomaterials can be detected, absorbed, reflected, modified, and generated with its assistance. Trends such as AI and ML are increasingly being integrated with biophotonic technologies to enhance image analysis, pattern recognition, and diagnostic accuracy. These advancements allow for more precise and automated interpretations of biophotonic data, leading to improved diagnostic capabilities. Therefore, this trend further drive demand for the US Biophotonics Market during the forecast period.

The growing preference for minimally invasive medical procedures is a major driver for the demand in the US biophotonics market. Patients and healthcare providers increasingly favor these procedures due to their numerous benefits, including reduced

risk of complications, shorter recovery times, and lower healthcare costs. Biophotonic technologies, such as optical coherence tomography (OCT) and laser-based treatments, align perfectly with this trend by offering precise, non-invasive diagnostic and therapeutic options. For instance, OCT provides detailed imaging of internal tissues without the need for incisions, while laser therapies allow targeted treatment of conditions such as tumors and eye disorders with minimal damage to surrounding tissues. This shift towards less invasive methods enhances patient comfort and outcomes which also boosts the adoption of advanced biophotonic solutions in clinical practice. Consequently, the growing preference for minimally invasive procedures significantly propels the biophotonics market in the US, driving technological advancements and market expansion. However, advanced technology and precision engineering required for biophotonic devices result in high costs and regulatory compliance can stifle market growth during the forecast period 2024-2032.

Major market player included in this report are:

Thermo Fisher Scientific Inc.  
Glenbrook Technologies Inc.  
Becton, Dickinson and Company  
PerkinElmer Inc.  
Zenalux Biomedical Inc.  
Company 6  
Company 7  
Company 8  
Company 9  
Company 10

The detailed segments and sub-segment of the market are explained below:

By End User

Medical Diagnostics  
Medical Therapeutic  
Tests & Components  
Nonmedical Application

By Application

See-through Imaging  
Inside Imaging  
Spectro Molecular

Surface Imaging  
Microscopy  
Light Therapy  
Analytical Sensing  
Biosensors

Years considered for the study are as follows:

Historical year – 2022

Base year – 2023

Forecast period – 2024 to 2032

Key Takeaways:

Market Estimates & Forecast for 10 years from 2022 to 2032.

Annualized revenues and Country level analysis for each market segment.

Detailed analysis of geographical landscape with Country level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of competitive structure of the market.

Demand side and supply side analysis of the market.

## Contents

### **CHAPTER 1. US BIOPHOTONICS MARKET DEFINITION AND RESEARCH ASSUMPTIONS**

- 1.1. Research Objective
- 1.2. Market Definition
- 1.3. Research Assumptions
  - 1.3.1. Inclusion & Exclusion
  - 1.3.2. Limitations
  - 1.3.3. Supply Side Analysis
    - 1.3.3.1. Availability
    - 1.3.3.2. Infrastructure
    - 1.3.3.3. Regulatory Environment
    - 1.3.3.4. Market Competition
    - 1.3.3.5. Economic Viability (Consumer's Perspective)
  - 1.3.4. Demand Side Analysis
    - 1.3.4.1. Regulatory frameworks
    - 1.3.4.2. Technological Advancements
    - 1.3.4.3. Environmental Considerations
    - 1.3.4.4. Consumer Awareness & Acceptance
- 1.4. Estimation Methodology
- 1.5. Years Considered for the Study
- 1.6. Currency Conversion Rates

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

- 2.1. US Biophotonics Market Size & Forecast (2022- 2032)
- 2.2. Segmental Summary
  - 2.2.1. By End User
  - 2.2.2. By Application
- 2.3. Key Trends
- 2.4. Recession Impact
- 2.5. Analyst Recommendation & Conclusion

### **CHAPTER 3. US BIOPHOTONICS MARKET DYNAMICS**

- 3.1. Market Drivers
- 3.2. Market Challenges

### 3.3. Market Opportunities

## **CHAPTER 4. US BIOPHOTONICS MARKET INDUSTRY ANALYSIS**

### 4.1. Porter's 5 Force Model

- 4.1.1. Bargaining Power of Suppliers
- 4.1.2. Bargaining Power of Buyers
- 4.1.3. Threat of New Entrants
- 4.1.4. Threat of Substitutes
- 4.1.5. Competitive Rivalry
- 4.1.6. Futuristic Approach to Porter's 5 Force Model
- 4.1.7. Porter's 5 Force Impact Analysis

### 4.2. PESTEL Analysis

- 4.2.1. Political
- 4.2.2. Economical
- 4.2.3. Social
- 4.2.4. Technological
- 4.2.5. Environmental
- 4.2.6. Legal

### 4.3. Top investment opportunity

### 4.4. Top winning strategies

### 4.5. Disruptive Trends

### 4.6. Industry Expert Perspective

### 4.7. Analyst Recommendation & Conclusion

## **CHAPTER 5. US BIOPHOTONICS MARKET SIZE & FORECASTS BY END USER 2022-2032**

### 5.1. Medical Diagnostics

### 5.2. Medical Therapeutic

### 5.3. Tests & Components

### 5.4. Nonmedical Application

## **CHAPTER 6. US BIOPHOTONICS MARKET SIZE & FORECASTS BY APPLICATION 2022-2032**

### 6.1. See-through Imaging

### 6.2. Inside Imaging

### 6.3. Spectro Molecular

- 6.4. Surface Imaging
- 6.5. Microscopy
- 6.6. Light Therapy
- 6.7. Analytical Sensing
- 6.8. Biosensors

## **CHAPTER 7. COMPETITIVE INTELLIGENCE**

- 7.1. Key Company SWOT Analysis
  - 7.1.1. Company
  - 7.1.2. Company
  - 7.1.3. Company
- 7.2. Top Market Strategies
- 7.3. Company Profiles
  - 7.3.1. Thermo Fisher Scientific Inc.
    - 7.3.1.1. Key Information
    - 7.3.1.2. Overview
    - 7.3.1.3. Financial (Subject to Data Availability)
    - 7.3.1.4. Product Summary
    - 7.3.1.5. Market Strategies
  - 7.3.2. Glenbrook Technologies Inc.
  - 7.3.3. Becton, Dickinson and Company
  - 7.3.4. PerkinElmer Inc.
  - 7.3.5. Zenalux Biomedical Inc.
  - 7.3.6. Company
  - 7.3.7. Company
  - 7.3.8. Company
  - 7.3.9. Company
  - 7.3.10. Company

## **CHAPTER 8. RESEARCH PROCESS**

- 8.1. Research Process
  - 8.1.1. Data Mining
  - 8.1.2. Analysis
  - 8.1.3. Market Estimation
  - 8.1.4. Validation
  - 8.1.5. Publishing
- 8.2. Research Attributes



## List Of Tables

### LIST OF TABLES

TABLE 1. US Biophotonics market, report scope

TABLE 2. US Biophotonics market estimates & forecasts by End User 2022-2032 (USD Billion)

TABLE 3. US Biophotonics market estimates & forecasts by Application 2022-2032 (USD Billion)

TABLE 4. US Biophotonics market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 5. US Biophotonics market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 6. US Biophotonics market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 7. US Biophotonics market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 8. US Biophotonics market by segment, estimates & forecasts, 2022-2032 (USD Billion)

TABLE 9. U.S. Biophotonics market estimates & forecasts, 2022-2032 (USD Billion)

TABLE 10. U.S. Biophotonics market estimates & forecasts by segment 2022-2032 (USD Billion)

TABLE 11. U.S. Biophotonics market estimates & forecasts by segment 2022-2032 (USD Billion)

TABLE 12. List of secondary sources, used in the study of US Biophotonics Market.

TABLE 13. List of primary sources, used in the study of US Biophotonics Market.

TABLE 14. Years considered for the study.

TABLE 15. Exchange rates considered.



## List Of Figures

### LIST OF FIGURES

- FIG 1. US Biophotonics market, research methodology
- FIG 2. US Biophotonics market, market estimation techniques
- FIG 3. US market size estimates & forecast methods.
- FIG 4. US Biophotonics market, key trends 2023
- FIG 5. US Biophotonics market, growth prospects 2022-2032
- FIG 6. US Biophotonics market, porters 5 force model
- FIG 7. US Biophotonics market, pestel analysis
- FIG 8. US Biophotonics market, value chain analysis
- FIG 9. US Biophotonics market by segment, 2022 & 2032 (USD Billion)
- FIG 10. US Biophotonics market by segment, 2022 & 2032 (USD Billion)
- FIG 11. US Biophotonics market by segment, 2022 & 2032 (USD Billion)
- FIG 12. US Biophotonics market by segment, 2022 & 2032 (USD Billion)
- FIG 13. US Biophotonics market by segment, 2022 & 2032 (USD Billion)
- FIG 14. US Biophotonics market, company market share analysis (2023)

## I would like to order

Product name: US Biophotonics Market Size study, by End User (Medical Diagnostics, Medical Therapeutic, Tests & Components, Nonmedical Application) by Application (See-through Imaging, Inside Imaging, Spectro Molecular, Surface Imaging, Microscopy, Light Therapy, Analytical Sensing, Biosensors) Forecasts 2022-2032

Product link: <https://marketpublishers.com/r/U235AC735625EN.html>

Price: US\$ 3,218.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/U235AC735625EN.html>

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**

Customer signature \_\_\_\_\_

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

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