

Smart Labels Market Report by Technology (Radio-Frequency Identification (RFID), Electronic Article Surveillance (EAS), Electronic Shelf Label (ESL), Sensing Labels, Near Field Communication (NFC)), Component (Batteries, Transceivers, Microprocessors, Memories, and Others), End-User (Retail, Logistics and Transportation, Healthcare, Food and Beverage, Aerospace, Data Centers and Libraries, and Others), and Region 2024-2032

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Abstracts

The global smart labels market size reached US\$ 10.9 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 29.7 Billion by 2032, exhibiting a growth rate (CAGR) of 11.4% during 2024-2032. The growing need for reducing shoplifting and theft, increasing usage of built-in utility in smartphones to read QR codes, and rising awareness among manufacturers represent some of the key factors driving the market.

Rising Need to Access Nutritional Facts and Other Product Related Information Facilitating Market Growth

With the easy availability of information over the internet and the surging prevalence of chronic diseases, there is an increase in the number of people who are consciously paying attention to product labeling for understanding the nutrition facts. As a result, there is a rise in the need for smart labels that comprise information about allergens, third-party certifications, usage instructions, social compliance programs, and safe handling. Smart labels also offer smart traceability of a product and help maintain its



authenticity.

Competitive analysis such as market structure, market share by key players, player positioning, top winning strategies, competitive dashboard, and company evaluation quadrant has been covered in the report. Also, detailed profiles of all major companies have been provided. The market structure is fragmented with a large number of players operating in the industry. The volume of new entrants is low in the smart labels industry due to high capital investment, product differentiation and economies of scale required to remain profitable in the smart labels industry. In addition, the smart labels market is characterized by high product differentiation and switching costs as several manufacturers have patented their product.

What are Smart Labels?

Smart labels, also known as smart tags, act as innovative transparent labels associated with digital technology and smart devices that enable consumers to access detailed information about their products. They are manufactured from paper, fabrics, or plastics and are available as electronic labels, printed labels, or chip labels. They comprise various technologies, such as radio-frequency identification (RFID), electronic article surveillance (EAS), electronic shelf labels (ESLs), sensing labels, and near field communication (NFC). They offer various advantages, including automated reading, quick identification, re-programmability, high tolerance, and reduced errors. They also provide high levels of productivity, accuracy, readability, and inventory management to manufacturers. They assist in tracking products and recording information for inventory management. As a result, smart labels find applications in the retail, logistics and transportation, healthcare, automotive, manufacturing, and food and beverage (F&B) sectors across the globe.

Smart Labels Market Trends:

At present, the increasing demand for smart labels in security and tracking solutions, as they help in reducing shoplifting and theft, represents one of the key factors supporting the growth of the market. Additionally, the growing awareness among manufacturers about smart labels, is offering a positive market outlook. Besides this, the escalating demand for smart labels, as they enable consumers to access information by their own preferred method, such as visiting a website and scanning product codes using a smartphone, is propelling the growth of the market. In addition, the rising utilization of smart labels due to a built-in utility in smartphones to read QR codes and access the information provided by smart labels is offering lucrative growth opportunities to industry



investors. Apart from this, the increasing demand for smart labels, as they provide highly reliable and accurate information about any product, is strengthening the growth of the market. Moreover, the growing employment of smart labels, as they make packaging more appealing and informative in terms of content and shipping details on packaged goods, is positively influencing the market. In line with this, the rising demand for smart labels on account of the increasing demand for a green environment is contributing to the growth of the market. Some of the other growth-inducing factors include the growing number of retail outlets, increasing brand participation, and rising demand for demand for anti-theft devices.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global smart labels market report, along with forecasts at the global and regional level from 2024-2032. Our report has categorized the market based on technology, component and end-user.

Technology Insights:

Radio-Frequency Identification (RFID) Electronic Article Surveillance (EAS) Electronic Shelf Label (ESL) Sensing Labels Near Field Communication (NFC)

The report has provided a detailed breakup and analysis of the smart labels market based on the technology. This includes radio-frequency identification (RFID), electronic article surveillance (EAS), electronic shelf label (ESL), sensing labels, and near field communication (NFC). According to the report, radio-frequency identification (RFID) represented the largest segment due to the features offered, such as information accuracy, real-time tracking, and automatic data capture. RFID is highly preferred to maintain the synchronized record for inventory and supply chain management.

Component Insights:

Batteries Transceivers Microprocessors Memories Others



A detailed breakup and analysis of the smart labels market based on the component has also been provided in the report. This includes batteries, transceivers, microprocessors, memories, and others. According to the report, batteries accounted for the largest market share as they are used to power the radio signal transceiver embedded in smart label tags. The presence of batteries in active smart labels help them activate regardless of the presence of a reader or interrogator in proximity. In addition, batteries enabled smart labels are very useful for tracking high-value goods that need to be scanned over long ranges.

End-User Insights:

Retail Logistics and Transportation Healthcare Food and Beverage Aerospace Data Centers and Libraries Others

A detailed breakup and analysis of the smart labels market based on the end-user has also been provided in the report. This includes retail, logistics and transportation, healthcare, food and beverage, aerospace, data centers and libraries, and others. According to the report, retail accounted for the largest market share as companies in the retail segment are highly benefiting from smart label technology. They can use the data to understand the mindset of customers and manufacture products accordingly. Moreover, organizations can achieve huge time savings, which is also leading to reduced labor costs as companies no longer have to rely on a handheld scanner to extract information on products.

Regional Insights:

North America Europe Asia Pacific Middle East and Africa Latin America

The report has also provided a comprehensive analysis of all the major regional



markets, which include North America, Europe, Asia Pacific, the Middle East and Africa, and Latin America. According to the report, North America was the largest market for smart labels. Some of the factors driving the North America smart labels market included the growing penetration of smart labels in merchandises and assets tracking applications, increasing labor costs and issues related to price integrity, and rising demand among large manufacturers and wholesalers. Additionally, the increasing utilization of digital technology, along with the growing demand for smart labels in various sectors, such as healthcare, pharmaceuticals, logistics, retail, food and beverage (F&B), is positively influencing the market.

Competitive Landscape:

The report has also provided a comprehensive analysis of the competitive landscape in the global smart labels market. Some of the companies covered in the report include:

Avery Dennison Corporation CCL Industries Inc. Checkpoints Systems, Inc. Zebra Technologies Corporation Intermec Inc. Invengo Technology Pte. Ltd. Sato Holdings Corporation Thin Film Electronics ASA (Ensurge Micropower ASA) Smartrac N.V. Muehlbauer Holding AG

Please note that this only represents a partial list of companies, and the complete list has been provided in the report.

Key Questions Answered in This Report

1. How big is the global smart labels market?

2. What is the expected growth rate of the global smart labels market during 2024-2032?

- 3. What are the key factors driving the global smart labels market?
- 4. What has been the impact of COVID-19 on the global smart labels market?
- 5. What is the breakup of the global smart labels market based on the technology?
- 6. What is the breakup of the global smart labels market based on the component?
- 7. What is the breakup of the global smart labels market based on the end-user?
- 8. What are the key regions in the global smart labels market?



9. Who are the key players/companies in the global smart labels market?



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