

# Connected Packaging Market Forecasts to 2034 – Global Analysis By Type (Active Packaging, Intelligent Packaging, and Interactive Packaging), Technology, Packaging Type, Packaging Material, Application, End User and By Geography

<https://marketpublishers.com/r/C9FD2040AF04EN.html>

Date: May 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: C9FD2040AF04EN

## Abstracts

According to Statistics MRC, the Global Connected Packaging Market is accounted for \$31.0 billion in 2026 and is expected to reach \$57.4 billion by 2034 growing at a CAGR of 8.0% during the forecast period. Connected packaging integrates physical packaging with digital technologies such as QR codes, NFC, and sensors to enable real-time communication between products and consumers. This technology enhances supply chain visibility, combats counterfeiting, and creates interactive brand experiences. By bridging the physical and digital worlds, connected packaging improves inventory management, ensures product authenticity, and drives consumer engagement, ultimately delivering greater operational efficiency and brand loyalty.

### Market Dynamics:

#### Driver:

Growing demand for supply chain transparency and anti-counterfeiting

Brands and regulators are increasingly prioritizing product authenticity and traceability to combat the rising tide of counterfeit goods, which pose safety and reputational risks. Connected packaging technologies, such as RFID and QR codes, provide a digital thread that allows stakeholders to verify a product's origin and journey from factory to shelf. This real-time visibility helps identify diversion, prevent fraud, and ensure regulatory compliance. As global supply chains become more complex and consumers

demand ethical sourcing, the adoption of connected packaging as a tool for transparency and brand protection is accelerating rapidly across multiple industries.

**Restraint:**

High initial investment and integration complexity

Implementing connected packaging solutions requires significant capital expenditure on hardware, software platforms, and printing technologies, which can be prohibitive for small and medium-sized enterprises. Additionally, integrating these digital systems with existing manufacturing lines, enterprise resource planning (ERP) systems, and supply chain networks is technically complex and often requires specialized expertise. The need to manage large volumes of data and ensure interoperability between different technologies and stakeholders adds further layers of difficulty. These high upfront costs and integration challenges can slow widespread adoption, particularly in price-sensitive markets and legacy production environments.

**Opportunity:**

Expansion of smart labeling and consumer engagement trends

The rapid proliferation of smartphones and the growing consumer appetite for interactive, personalized experiences present a significant opportunity for connected packaging. Smart labels and QR codes can unlock digital content such as product origins, usage instructions, loyalty rewards, and augmented reality experiences, directly engaging the consumer at the point of use. This capability transforms packaging into a powerful marketing channel and data collection tool. As brands shift focus toward post-purchase engagement and direct-to-consumer communication, the demand for cost-effective, scalable connected packaging solutions is expected to surge, driving innovation and market expansion.

**Threat:**

Data privacy and cybersecurity vulnerabilities

The extensive collection of consumer data through connected packaging including location, usage habits, and personal information raises significant privacy and security concerns. Unauthorized access to this data could lead to identity theft, corporate espionage, or malicious manipulation of supply chain information. Furthermore,

cyberattacks on cloud-based platforms that manage connected packaging data could disrupt traceability and authentication services, eroding consumer trust. Navigating complex global data protection regulations, such as GDPR, adds compliance burdens. Protecting data integrity and ensuring secure communication channels remains a critical threat that requires continuous investment in robust cybersecurity measures.

### **Covid-19 Impact:**

The COVID-19 pandemic initially disrupted the connected packaging market due to supply chain shutdowns and reduced manufacturing activity. However, the crisis dramatically accelerated the need for contactless interactions and enhanced hygiene monitoring. Consumers and logistics providers sought packaging that could provide product information and verify authenticity without physical touch. The pandemic underscored the value of connected packaging in enabling contactless delivery, pharmaceutical traceability for vaccines, and direct-to-consumer engagement. As a result, the market experienced a strong rebound and sustained growth, with businesses investing in digital transformation to build more resilient and transparent supply chains.

The hardware segment is expected to be the largest during the forecast period

The hardware segment is expected to account for the largest market share, driven by the essential requirement for physical components such as NFC tags, RFID inlays, sensors, and printed circuit boards. These hardware elements form the backbone of any connected packaging system, enabling data capture and transmission. The declining cost of tags and sensors, coupled with high-volume deployments in retail and logistics, ensures the segment maintains dominance throughout the forecast period.

The interactive packaging segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the interactive packaging segment is predicted to witness the highest growth rate, fueled by brand demand for direct consumer engagement and personalized experiences. Technologies like AR and QR codes allow consumers to interact with packaging via smartphones, accessing games, videos, and loyalty programs. This creates valuable two-way communication channels, driving repeat purchases and brand loyalty, making it the fastest-growing type in the connected packaging market.

### **Region with largest share:**

During the forecast period, the North America region is expected to hold the largest market share, due to the presence of major technology providers, advanced retail infrastructure, and early adoption of smart packaging by food, beverage, and pharmaceutical companies. Strong regulatory focus on drug traceability (DSCSA) and counterfeit prevention drives demand. Additionally, high smartphone penetration and consumer tech-savviness accelerate deployment, ensuring the region maintains its leading position.

### **Region with highest CAGR:**

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, fuelled by rapid e-commerce expansion, growing manufacturing hubs in China and India, and increasing government mandates for product traceability. Rising middle-class income and Smartphone adoption boost consumer engagement via connected packaging. Furthermore, large-scale investments in smart logistics and retail modernization, particularly in Southeast Asian countries, are creating substantial growth opportunities for connected packaging solutions.

### **Key players in the market**

Some of the key players in Connected Packaging Market include Amcor plc, Avery Dennison Corporation, 3M Company, Stora Enso Oyj, Tetra Pak International S.A., Huhtamäki Oyj, Constantia Flexibles Group GmbH, Ball Corporation, R.R. Donnelley & Sons Company, Sealed Air Corporation, WestRock Company, International Paper Company, CCL Industries Inc., Berry Global Group, Inc., and Thin Film Electronics ASA.

### **Key Developments:**

In April 2026, Sealed Air Corporation announced the completion of its previously announced acquisition by funds affiliated with CD&R. Sealed Air will remain headquartered in Charlotte, North Carolina, and will continue to operate under the Sealed Air name. CD&R is committed to supporting Sealed Air's growth across its Food and Protective businesses, building on the Company's legacy of delivering high-performance materials, automated packaging equipment and world-class service.

In April 2026, Amcor has unveiled a new closure targeting applications such as mayonnaise, ketchup and sweet sauces. The 55 mm Flava Flip Top Closure 38/400 is a

lightweighted upgrade compared to previous versions. The new generation of the 38/400 neck finish range is designed for circularity to help brand owners meet and exceed their sustainability goals.

#### Types Covered:

Active Packaging

Intelligent Packaging

Interactive Packaging

#### Technologies Covered:

QR Codes

Near Field Communication

Radio Frequency Identification

Sensors

Augmented Reality (AR)

Bluetooth

#### Packaging Types Covered:

Bottles & Jars

Boxes & Cartons

Pouches & Sachets

Labels

Other Packaging Types

### Packaging Materials Covered:

Plastic

Paper & Cardboard

Glass

Metal

### Applications Covered:

Product Authentication & Anti-counterfeiting

Traceability & Supply Chain Monitoring

Consumer Engagement & Marketing

Inventory Management

Smart Labeling

### End Users Covered:

Food & Beverages

Pharmaceuticals & Healthcare

Personal Care & Cosmetics

Consumer Electronics

Logistics & Supply Chain

Other End Users

## Regions Covered:

### North America

US

Canada

Mexico

### Europe

Germany

UK

Italy

France

Spain

Rest of Europe

### Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

**What our report offers:**

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2032 and 2034
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

## Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

### Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

## Contents

### **1 EXECUTIVE SUMMARY**

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

### **2 RESEARCH FRAMEWORK**

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
  - 2.4.1 Data Collection (Primary and Secondary)
  - 2.4.2 Data Modeling and Estimation Techniques
  - 2.4.3 Data Validation and Triangulation
  - 2.4.4 Analytical and Forecasting Approach

### **3 MARKET DYNAMICS AND TREND ANALYSIS**

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

### **4 COMPETITIVE AND STRATEGIC ASSESSMENT**

- 4.1 Porter's Five Forces Analysis
  - 4.1.1 Supplier Bargaining Power
  - 4.1.2 Buyer Bargaining Power
  - 4.1.3 Threat of Substitutes
  - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

## **5 GLOBAL CONNECTED PACKAGING MARKET, BY TYPE**

- 5.1 Active Packaging
- 5.2 Intelligent Packaging
- 5.3 Interactive Packaging

## **6 GLOBAL CONNECTED PACKAGING MARKET, BY TECHNOLOGY**

- 6.1 QR Codes
- 6.2 Near Field Communication
- 6.3 Radio Frequency Identification
- 6.4 Sensors
- 6.5 Augmented Reality (AR)
- 6.6 Bluetooth

## **7 GLOBAL CONNECTED PACKAGING MARKET, BY PACKAGING TYPE**

- 7.1 Bottles & Jars
- 7.2 Boxes & Cartons
- 7.3 Pouches & Sachets
- 7.4 Labels
- 7.5 Other Packaging Types

## **8 GLOBAL CONNECTED PACKAGING MARKET, BY PACKAGING MATERIAL**

- 8.1 Plastic
- 8.2 Paper & Cardboard
- 8.3 Glass
- 8.4 Metal

## **9 GLOBAL CONNECTED PACKAGING MARKET, BY APPLICATION**

- 9.1 Product Authentication & Anti-counterfeiting
- 9.2 Traceability & Supply Chain Monitoring
- 9.3 Consumer Engagement & Marketing

9.4 Inventory Management

9.5 Smart Labeling

## **10 GLOBAL CONNECTED PACKAGING MARKET, BY END USER**

10.1 Food & Beverages

10.2 Pharmaceuticals & Healthcare

10.3 Personal Care & Cosmetics

10.4 Consumer Electronics

10.5 Logistics & Supply Chain

10.6 Other End Users

## **11 GLOBAL CONNECTED PACKAGING MARKET, BY GEOGRAPHY**

11.1 North America

11.1.1 United States

11.1.2 Canada

11.1.3 Mexico

11.2 Europe

11.2.1 United Kingdom

11.2.2 Germany

11.2.3 France

11.2.4 Italy

11.2.5 Spain

11.2.6 Netherlands

11.2.7 Belgium

11.2.8 Sweden

11.2.9 Switzerland

11.2.10 Poland

11.2.11 Rest of Europe

11.3 Asia Pacific

11.3.1 China

11.3.2 Japan

11.3.3 India

11.3.4 South Korea

11.3.5 Australia

11.3.6 Indonesia

11.3.7 Thailand

11.3.8 Malaysia

- 11.3.9 Singapore
- 11.3.10 Vietnam
- 11.3.11 Rest of Asia Pacific
- 11.4 South America
  - 11.4.1 Brazil
  - 11.4.2 Argentina
  - 11.4.3 Colombia
  - 11.4.4 Chile
  - 11.4.5 Peru
  - 11.4.6 Rest of South America
- 11.5 Rest of the World (RoW)
  - 11.5.1 Middle East
    - 11.5.1.1 Saudi Arabia
    - 11.5.1.2 United Arab Emirates
    - 11.5.1.3 Qatar
    - 11.5.1.4 Israel
    - 11.5.1.5 Rest of Middle East
  - 11.5.2 Africa
    - 11.5.2.1 South Africa
    - 11.5.2.2 Egypt
    - 11.5.2.3 Morocco
    - 11.5.2.4 Rest of Africa

## **12 STRATEGIC MARKET INTELLIGENCE**

- 12.1 Industry Value Network and Supply Chain Assessment
- 12.2 White-Space and Opportunity Mapping
- 12.3 Product Evolution and Market Life Cycle Analysis
- 12.4 Channel, Distributor, and Go-to-Market Assessment

## **13 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES**

- 13.1 Mergers and Acquisitions
- 13.2 Partnerships, Alliances, and Joint Ventures
- 13.3 New Product Launches and Certifications
- 13.4 Capacity Expansion and Investments
- 13.5 Other Strategic Initiatives

## **14 COMPANY PROFILES**

- 14.1 Amcor plc
- 14.2 Avery Dennison Corporation
- 14.3 3M Company
- 14.4 Stora Enso Oyj
- 14.5 Tetra Pak International S.A.
- 14.6 Huhtamäki Oyj
- 14.7 Constantia Flexibles Group GmbH
- 14.8 Ball Corporation
- 14.9 R.R. Donnelley & Sons Company
- 14.10 Sealed Air Corporation
- 14.11 WestRock Company
- 14.12 International Paper Company
- 14.13 CCL Industries Inc.
- 14.14 Berry Global Group, Inc.
- 14.15 Thin Film Electronics ASA

## List Of Tables

### LIST OF TABLES

Table 1 Global Connected Packaging Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Connected Packaging Market Outlook, By Type (2023-2034) (\$MN)

Table 3 Global Connected Packaging Market Outlook, By Active Packaging (2023-2034) (\$MN)

Table 4 Global Connected Packaging Market Outlook, By Intelligent Packaging (2023-2034) (\$MN)

Table 5 Global Connected Packaging Market Outlook, By Interactive Packaging (2023-2034) (\$MN)

Table 6 Global Connected Packaging Market Outlook, By Technology (2023-2034) (\$MN)

Table 7 Global Connected Packaging Market Outlook, By QR Codes (2023-2034) (\$MN)

Table 8 Global Connected Packaging Market Outlook, By Near Field Communication (2023-2034) (\$MN)

Table 9 Global Connected Packaging Market Outlook, By Radio Frequency Identification (2023-2034) (\$MN)

Table 10 Global Connected Packaging Market Outlook, By Sensors (2023-2034) (\$MN)

Table 11 Global Connected Packaging Market Outlook, By Augmented Reality (AR) (2023-2034) (\$MN)

Table 12 Global Connected Packaging Market Outlook, By Bluetooth (2023-2034) (\$MN)

Table 13 Global Connected Packaging Market Outlook, By Packaging Type (2023-2034) (\$MN)

Table 14 Global Connected Packaging Market Outlook, By Bottles & Jars (2023-2034) (\$MN)

Table 15 Global Connected Packaging Market Outlook, By Boxes & Cartons (2023-2034) (\$MN)

Table 16 Global Connected Packaging Market Outlook, By Pouches & Sachets (2023-2034) (\$MN)

Table 17 Global Connected Packaging Market Outlook, By Labels (2023-2034) (\$MN)

Table 18 Global Connected Packaging Market Outlook, By Other Packaging Types (2023-2034) (\$MN)

Table 19 Global Connected Packaging Market Outlook, By Packaging Material (2023-2034) (\$MN)

Table 20 Global Connected Packaging Market Outlook, By Plastic (2023-2034) (\$MN)

Table 21 Global Connected Packaging Market Outlook, By Paper & Cardboard (2023-2034) (\$MN)

Table 22 Global Connected Packaging Market Outlook, By Glass (2023-2034) (\$MN)

Table 23 Global Connected Packaging Market Outlook, By Metal (2023-2034) (\$MN)

Table 24 Global Connected Packaging Market Outlook, By Application (2023-2034) (\$MN)

Table 25 Global Connected Packaging Market Outlook, By Product Authentication & Anti-counterfeiting (2023-2034) (\$MN)

Table 26 Global Connected Packaging Market Outlook, By Traceability & Supply Chain Monitoring (2023-2034) (\$MN)

Table 27 Global Connected Packaging Market Outlook, By Consumer Engagement & Marketing (2023-2034) (\$MN)

Table 28 Global Connected Packaging Market Outlook, By Inventory Management (2023-2034) (\$MN)

Table 29 Global Connected Packaging Market Outlook, By Smart Labeling (2023-2034) (\$MN)

Table 30 Global Connected Packaging Market Outlook, By End User (2023-2034) (\$MN)

Table 31 Global Connected Packaging Market Outlook, By Food & Beverages (2023-2034) (\$MN)

Table 32 Global Connected Packaging Market Outlook, By Pharmaceuticals & Healthcare (2023-2034) (\$MN)

Table 33 Global Connected Packaging Market Outlook, By Personal Care & Cosmetics (2023-2034) (\$MN)

Table 34 Global Connected Packaging Market Outlook, By Consumer Electronics (2023-2034) (\$MN)

Table 35 Global Connected Packaging Market Outlook, By Logistics & Supply Chain (2023-2034) (\$MN)

Table 36 Global Connected Packaging Market Outlook, By Other End Users (2023-2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) are also represented in the same manner as above.

## I would like to order

Product name: Connected Packaging Market Forecasts to 2034 – Global Analysis By Type (Active Packaging, Intelligent Packaging, and Interactive Packaging), Technology, Packaging Type, Packaging Material, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/C9FD2040AF04EN.html>

Price: US\$ 4,150.00 (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/C9FD2040AF04EN.html>