

The Global Market for Smart (Active and Intelligent) Packaging 2023-2033

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Abstracts

Smart packaging incorporates novel technologies that improve its core functions and provide additional capabilities compared to conventional packaging, allowing for improved personalization and traceability while minimizing waste. 'Smart packaging' refers to both active packaging and intelligent packaging. Active packaging serves to prolong the shelf life of sealed goods & produce, while intelligent packaging utilizes advanced technology to communication data on package contents or other information. The two technologies frequently overlap (e.g. food chain management).

Consumer demand for convenience, packaging security concerns (anti-counterfeit and anti-theft), and the requirement to track goods along the supply chain drive demand for smart packaging. Use of smart packaging can help extend the shelf life of food, improve product quality, maintain safety, and track product performance throughout the supply chain via the use of sensors (biosensors, gas sensors), indications (temperature, freshness), and data carriers (barcode, RFID (radio frequency identification)). The use of technologies such as AI, IoT, computer vision, and 3D printing is leading to the next generation of smart packaging solutions. Sustainability concerns are also playing an integral part in the evolution of these solutions, prompting businesses to adopt new business models like reusable packaging-as-a-service and custom designs to cut down on waste.

Report contents include:

Recent innovations and industry activity in smart packaging.

Market drivers and trends in smart packaging.



Market map for the smart packaging sector.

Analysis of sustainability in smart packaging.

Electronics in smart packaging.

Analysis of active smart packaging market including scavengers, diffusion systems, microwave susceptors, antimicrobial agents and phase change materials in packaging.

Analysis of intelligent smart packaging market including printed codes and markings, sensors and indictors, RFID and NFC.

Global revenues, historical and estimated to 2033, by technology type and end use market.

132 company profiles. Companies profiled include Akorn Technology, Inc., Apeel Sciences, Arylla, Avery Dennison, Cellr, Circolution, CollectID, Copptech, CuePath, Danaflex-Nano, Digimarc, DipoleRFID, Ennoventure, FL Technology, Fresh Inset, Handary, Hazel Technologies, Identiv, Infratab, Muuse, Mysteria Colorum (MyCol), NthDegree, ParxMaterials, ScanTrust, Securikett, SoFresh, Sufresca, Tempix and Wiliot.



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