

Smart Labels Set to Soar

A report predicts demand for RFID-enabled smart labels will accelerate sharply, fueled by new applications and falling prices.

By Jonathan Collins

Dec. 23, 2003—The report Smart Labels, published by Cleveland-based industrial market research firm The Freedonia Group, estimates that through the year 2007, the total U.S. market for smart labels will grow more than 23 percent annually, approaching 11 billion units and a value of \$460 million. But through 2007, RFID will be by far the fastest-growing smart label market segment growing 180 percent annually from around 10 million RFID labels sold in 2002.

Smart labels are low-cost packaging and product identification labels that are laminated with paper or plastic layers that give the labels the ability to interact either with RFID readers (in the case of RFID-enabled labels) or with the items to which they are attached (as is the case with time-temperature indicators). The growth in smart labels uptake will be driven by both existing and new labeling applications, based on the smart labels' ability to add value to labels' basic identification function.

Further spurring demand of RFID-enabled labels through 2012 will be falling prices, technological advances and the establishment of uniform RFID communications standards, says the report. New markets include item-level tagging of consumer products, intelligent drive-through payment systems for highway tolls and other services, and the tagging of videos and other rental goods. "All of these are already emerging, but they will not be high-volume markets over the next five years or so," says Paul Bailin, senior industry analyst for packaging and security at Freedonia.

The growth will mean that by 2012, demand for smart labels will surpass 30 billion units and be worth more than \$1.2 billion. RFID-enabled labels will account for 57 percent of all units sold, but RFID-enabled labels will comprise 65 percent of all smart label sales because the prices of RFID-enabled smart labels will be higher than those of non-RFID smart labels.

RFID smart label applications will also start to compete with non-RFID smart label applications. These applications include adding RFID technology to emerging smart label offerings such as time-temperature indicators or integrators (which track a product's exposure to damaging temperatures), as well as to established smart label applications, such as electronic article surveillance (EAS) anti-shoplifting labels. For example, while smart labels used in supply chain management applications are expected to reach 7.6 billion units by 2012, accounting for one-quarter of all smart label demand—all of these labels are expected to be RFID-enabled, according to Freedonia. "We classify pure EAS labels as retail security labels, and any hybrid EAS/RFID is considered a supply chain management RFID label. That means a growing share of the EAS business will be swallowed up by the RFID segment," says Bailin.

The 214-page report is available for \$3,900 from The Freedonia Group, 767 Beta Drive, Cleveland, OH 44143, or from the company's website, www.freedoniagroup.com.

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