



# A Game Changer for Pressure-sensitive Labels

**RFID technology is truly transformative, and may prompt a fresh look at your business**

In a relatively short amount of time—about two decades—the Internet of Things (IoT) has transformed the way we live, work, travel, play, and interact with countless products and services. Label converters now have a prime opportunity to grow their business by embracing the technology at the IoT's heart.

## The technology driving the IoT

The IoT is defined as a networking of devices (such as smartphones) with other objects in their vicinity. Much of that networking is enabled by radio frequency identification (RFID) technology.

RFID is typically contained on a durable, wafer-thin inlay. This inlay is embedded in an object, label or packaging, and can track, store and wirelessly transmit data to a device up to several feet away. That device can then access the Internet, where the data can be put to good use.

## RFID is everywhere

A growing number of everyday objects have been made “intelligent” with RFID.

Have you bought clothing lately? The label was probably integrated with an RFID inlay, helping the retailer manage its inventory and improve the consumer experience. You might also have been able to tap your smartphone on labels and packaging containing NFC to view information about the brand or product.

Ever used a smart key in a hotel? How about an EZPass to save time on toll roads? Run a race with “chip timing”? They're all examples of RFID in action.

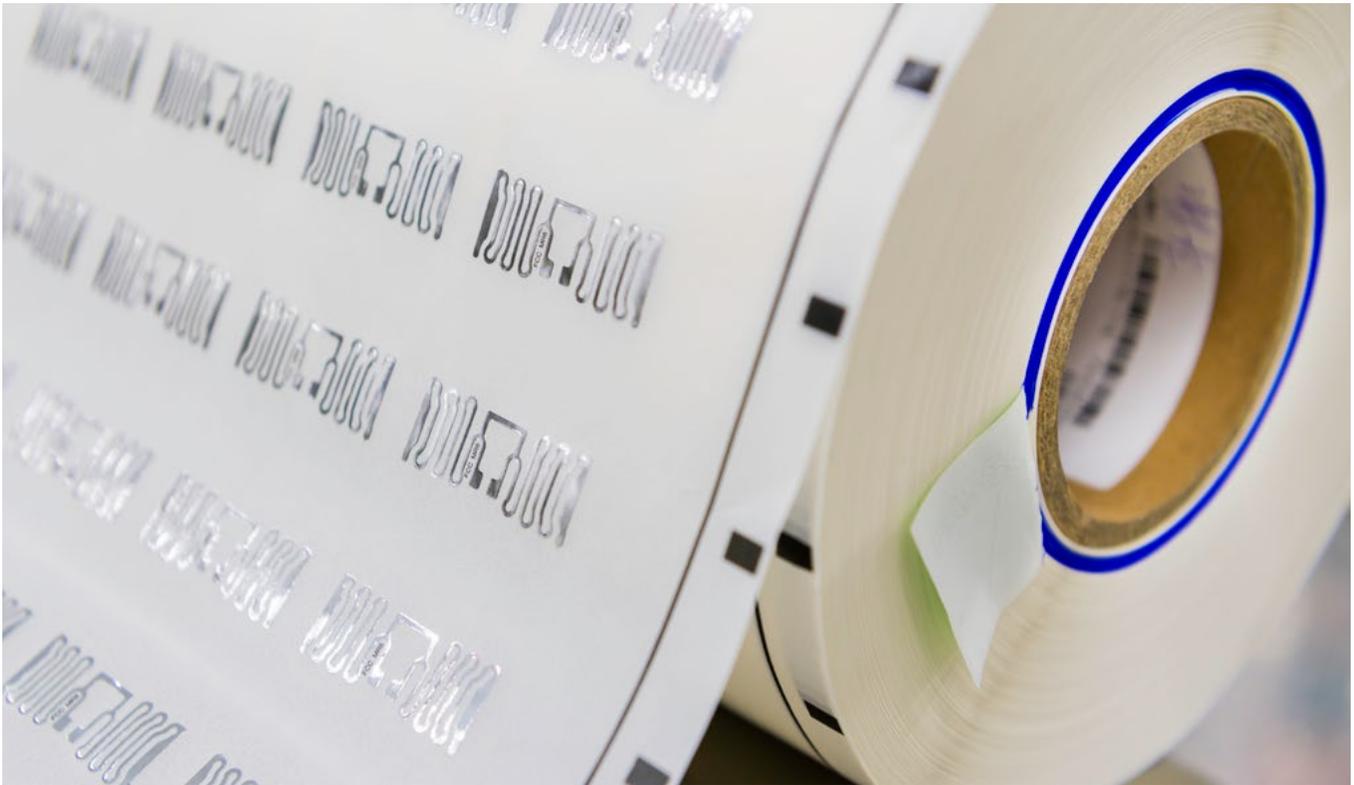
Hospitals use RFID to improve safety through enhanced visibility of use-by dates and increased accuracy over stock availability. Grocery chains and suppliers use RFID to rotate stock and ensure quality. Even dairy farmers use RFID livestock tags to make sure every cow in the herd is milked regularly.

The Institute of Electrical and Electronics Engineers estimates that by 2020, more than 50 billion objects will be connected to the Internet. Many of those objects will have RFID.

## Creating Intelligent Labels

RFID inlays can be integrated into virtually any pressure-sensitive label construction. The resulting “Intelligent Label” can enhance the shopping and buying experience, help a retailer manage inventory via UHF RFID, and help a brand owner more effectively engage with the consumer through NFC RFID.





In April 2016, for instance, Delta Air Lines integrated RFID into its pressure-sensitive baggage labels. The airline now uses hands-free tracking instead of barcodes and scanners. Initial deployment showed bags being tracked at a 99.9 percent success rate.

The airline's customers, meanwhile, have gained the ability to track their bags via Delta's smartphone app. Passengers can now confirm that they and their luggage are on the same flight.

## An opportunity for converters

Using RFID, Delta transformed its simple, pressure-sensitive luggage tags into an Intelligent Label that delivers greater value to its customers. It's a shining example of the sort of opportunity that awaits label converters.

"Why is RFID so exciting?" asked Kevin Rinehart, regional leader Intelligent Labels, Avery Dennison Label and Packaging Materials-North America. "Pressure-sensitive has been around for 75 years. And, as with any mature technology, it's rare you see really significant innovation. RFID, combined with pressure-sensitive, is very significant.

It's a game changer. And it gives label converters a golden opportunity to be on the cutting edge of a trend that's changing our world."

## Avery Dennison can help

Intelligent Labels offer a platform for brands across multiple industries to transform the way they do business and engage consumers with RFID. Label converters can—and should—play a key role in that transformation.

A leading provider of RFID, Avery Dennison, designs and manufactures solutions for multiple industries. With more than 800 patents and applications worldwide, advanced research and testing, and experienced technical resources, we understand what it takes to successfully integrate RFID and pressure-sensitive technologies.

We are here to provide the support you need to grow your business with this technology. To get started, contact your Avery Dennison sales or technical representative.

**To review the full RFID inlay portfolio, please visit [label.averydennison.com/intelligentlabel](http://label.averydennison.com/intelligentlabel)**

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