

# RFID in apparel retail

Expert advice from a neutral source - putting you on the right track



In the changing apparel landscape, our standards enable businesses to reach a new global customer base. Facilitating cross-border trading and diversifying business models, GS1's open global standards create a common thread for businesses to work together.

Our standards play their part around the world and around the clock - from scanning clothes in department stores or buying shoes online, to tracking shipments from production to the consumer. In fact, there are over 5 billion successful scans of a GS1 barcode every single day.

What's more, we make a difference for over 2 million members worldwide - enabling efficiency, safety and sustainability for a wide range of businesses and their customers.

## What's EPC?

Electronic Product Code (EPC) enabled RFID is the global standard maintained by GS1 for RFID technology. Created in collaboration with RFID suppliers and retail users, the EPC standard defines three key elements of the technology:

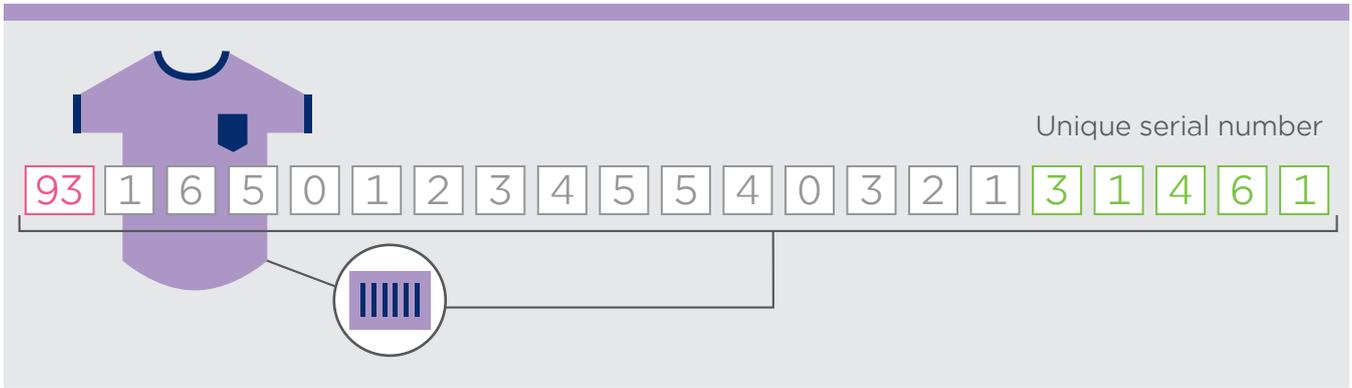
1. How data is to be stored on the tag
2. How a tag talks to the reader
3. How readers talk to business systems

---

## Why work with us?

We bring global best practice by working with a wide range of industry bodies and organisations.

Our aim is to see RFID implemented as quickly and cost effectively as possible to the benefit of all parties involved.



## Data on the tag

The data structure for tags is a simple extension of the widely used GS1 system of product identifiers. EPC RFID codes consist of each product's Global Trade Item Number (GTIN) – these are sometimes called UPC or EANs – with the addition of a serial number for each product instance and some instructions for the reader.

## Communicating that data

The EPC standard provides a blueprint for how tags and readers talk to each other – this means that as long as both are EPC compliant, any combination of tags and readers will work together. In order to do this, the industry has reduced the variability of tags and readers, uniting in the use of passive, Ultra High Frequency (UHF) tags.

## Storing and using that data

The final part of the EPC standard – how the reader links the data that it captures back into your systems – ultimately ensures the interoperability of your RFID solution. This enables the efficient, and automated, communication of data across your network of departments, suppliers and partners.

## What are the benefits of using EPC?

### Faster implementation

Building on standards already in use, helps reduce the time of integration by 25%.

### Reduced cost

The use of one tag specification allows the market to reach a critical mass – 6.9 billion tags were used in 2014 – leading to a 75% reduction in the cost of tags since 2011. Tag production is projected to reach 25 billion tags by 2020\*.

\*"Barcode and RFID Convergence:Enabling Greater Visibility Through Standards"  
VDC Research Group , November 2010

## Flexible

As an open standard, there's no proprietary technology used, meaning you can invest in confidence as any EPC tag will work with any EPC reader. Additionally, all vendors can implement EPC faster than any proprietary solution.

## Fit for purpose

Our standards are created by industry for industry – taking into account best practice.

## Global reach

As a global standard you can make the most of tagging at source, with local GS1 support for your suppliers – wherever they are.

## Platform for innovation

With a stable platform to work from, technology vendors can focus on solution innovation and application areas.

**To find out more about our consultancy services for the apparel sector, or to discuss your requirements in more detail, please contact us.**

## For more information

Contact GS1 Australia on

**1300 BARCODE** (1300 227 263)

Join GS1

[www.gs1au.org/how-to-get-started](http://www.gs1au.org/how-to-get-started)

More information

[www.gs1au.org/for-your-industry/apparel](http://www.gs1au.org/for-your-industry/apparel)

## GS1 Australia

Head Office, 8 Nexus Court, Mulgrave VIC 3170

Locked Bag 2, Mt Waverley VIC 3149

T 1300 227 263 | F +61 3 9558 9551 | ABN 67 005 529 920

[www.gs1au.org](http://www.gs1au.org)

GS1 is a registered trademark of GS1 AISBL.  
2188\_1116

## CONNECT WITH US

