The IATA (International Air Transport Association) Resolution 753 came into effect on 1 June 2018. It is a key driver behind RFID for baggage tracking. This means that by 2020, many airline customers will notice significant changes that will take the hassle out of managing their bags. The implementation will add transparent real-time baggage tracking options and help to reduce the likelihood of lost baggage, provide enhanced security, increased baggage handling efficiencies, and improve on-time departures, which all combine to greatly improve customer satisfaction.

Stora Enso’s Aero UCODE8 label is optimized for aviation industry - tracking and tracing bags. Aero incorporates a robust design and NXP’s UCODE 8 chip. These together offer best-in-class and true global performance in this specific RFID tagging application.
Key features of Aero

Global performance
Passive Aero UCODE 8 label enables excellent read distance compared to its size as well as fast inventory of dense RFID tag population. Aero labels comply with Auburn Radio Compliance (ARC) category U defined by the RFID Research Center at the University of Auburn. Category U is specifically designed for luggage tagging applications. Aero has been measured against high tuning plastic and rubber materials which simulate well the used luggage materials. High-performing Aero can also be utilized in various other supply-chain management applications.

Featuring UCode 8
UCODE 8 provides new features not present in NXP's earlier generation, UCODE 7 IC, including a self-adjust feature. This auto tuning mechanism ensures that the 'peak sensitivity' and thus consistent product performance is available in a broader range of operating frequencies and applications. UCODE 8 IC comes with 128-bit EPC memory and features also an unique 96-bit tag identifier (TID) as well as a pre-serialized EPC.

Optimized form factor
Aero UCODE8 label’s dimensions are optimized. The label fits perfectly on the currently used baggage tags and wide web delivery format optimizes the throughput of baggage tags during converting. 100% good Aero inlays on delivered roll will also maximize the yield of the baggage tag converting process.

About Stora Enso
Our aim is to replace non-renewable materials by innovating and developing new products and services based on renewable materials. And by transforming the world, we are transforming ourselves too; growing our expertise to meet the needs of our customers and overcome many of today’s raw material challenges. As the leading global provider of renewable solutions in packaging, biomaterials, wooden constructions and paper, we employ around 26,000 people in 35 countries. Intelligent Packaging by Stora Enso is a leading global provider of products and services that enable our customers’ digital transformation using the internet of things (IoT). We provide them with the means to connect physical items, gain efficiency, quality and visibility and exceed their customers’ expectations.

Theoretical read range forward

<table>
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<th>MHz</th>
<th>Free air</th>
<th>Cardboard</th>
<th>Plastic (PVC)</th>
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Orientation sensitivity

- H-plane
- E-plane

Technical details

Sales Code
500056

IC & electrical details
NXP's UCODE 8
128 bit EPC
860 - 960 MHz
EPC Gen2v2, ISO 18 000-63

Size
Wet inlay size 30 x 72 mm / 1.18 x 2.84 in

Web width
165 mm, 3-up

Operating temperature
-5 °C…+60 °C / +23 °F…+140 °F

Delivery details
76 mm / 3 in core
18 000 pcs/reel, 18 000 pcs/box
1 year shelf life in +20 °C / 68 °F, 50 % RH

Contact us for more information:
www.storaenso.com/intelligentpackaging

The performance of the product should always be tested in the actual application conditions. Our recommendations are based on our most current knowledge and experience and the pictures and illustrations presented in this document are for illustration purposes only. As our products are used in conditions beyond our control, we cannot assume any liability for damage caused through their use. Stora Enso reserves the right to change its products and services at any time without notice.