Sustainable RAIN RFID label for new retail and on-metal applications

ECO Stripe uniquely combines anti-tamper functionality with outstanding wide-band performance in on-metal and other hard-to-tag applications. ECO Stripe is fibre-based and highly engineered to enable unique tamper-proof functionality.

ECO Stripe makes an excellent, easy and cost-efficient solution in many different tagging scenarios. The anti-tamper label helps to prevent shrink and to reduce shoplifting, fraud and administrative errors. Unmanned retail is a fast-growing application area for RFID, and the ECO Stripe label provides merchandise visibility even for metallic items such as drink cans, enabling superior shopping experience.

Applications

Retail
Industry
Pharma
Key features of ECO Stripe

**Anti-tamper on-metal tag**
ECO Stripe is partially applied on a metallic object. The attached part couples with the metal surface and boosts antenna performance, providing a highly cost-efficient way to tag metallic items without compromising performance. With its thin label and small form factor, you can use ECO Stripe even in the smallest retail stock keeping units (SKU) or to tag small metallic industrial tools and parts. The paper-based structure allows tamper protection—a highly sought-after feature especially in unmanned retail applications where shrink poses one of the biggest challenges. If the tag is moved forcibly from the item, the label breaks requiring payment for the item.

**A reliable choice**
ECO Stripe passes industry standard tests for temperature and humidity (IEC 60068-2-67), temperature cycling (JESD22-A104-B) and tag bending tests. These comprehensive tests ensure ECO Stripe performs at all stages of the product’s life cycle and can safely be used to track items from source to point of sale.

**Green label**
ECO RFID tag technology enables Stora Enso to create sustainable RFID labels with environmentally friendly processes and materials. The 100% fibre-based ECO Stripe is manufactured with clean and green manufacturing processes using renewable materials. The product does not contain plastic or toxic materials, and it has a low carbon footprint. Eco Stripe is recyclable and biodegradable, minimising the ecological footprint and making it a natural choice for high-volume applications.

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**Technical details**

**Sales Code**
500023

**IC & electrical details**
NXP UCODE 6
128-bit EPC
860–960 MHz
EPC Gen2v2, ISO 18 000-63

**Size**
Paper tag size 43 x 21 mm / 1.69 x 0.83 in.

**Web width**
46 mm

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

**Delivery details**
76 mm / 3 in. core
1-year shelf life in +20°C / 68°F, 50% RH

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**Theoretical read range forward**

![Theoretical read range forward graph]

**Orientation sensitivity**

![Orientation sensitivity graph]

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**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.

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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.