

## Flexible & Wearable Electronics Application Experiments



Incrypton

[www.ingcrypton.com](http://www.ingcrypton.com)



### Problem to be solved

Incrypton serves two key purposes 1) validation of cold chain management (which accounts for 30% of food chain losses and up to 50% of vaccines) and 2) supply chain integrity, proving the providence of pharmaceuticals with around 10% of pharmaceutical shipments now being counterfeit. The Incrypton project sought to produce a secure label in relevant quantities for field trials, at a competitive price with a flexible form factor to enable its application to none-flat surfaces.

### Solution provided by SmartEES

Two tags were produced through the Smartees project (55mm x 85mm & 40mm x 40mm). The tags were produced in volume (4,000). The required temperature accuracy (+/-0.5 degrees centigrade) was confirmed and digital calibration certificates were produced to confirm this process. A number of flexible components were investigated as part of the project but conventional electronics were employed to ensure a robust final product.

### Business model & impact

Working as a supplier of tags and IT infrastructure, Incrypton offer suppliers of temperature sensitive supplies a way to ensure the security of their supply chain and quality of goods, reducing risk to the supply chain. Conceived as a solution to the “last mile” problem in the pharmaceutical cold chain, the INCRYPTON smart tag product addresses many other markets. The badge is a true data logger which confirms authenticity and accurately measures and records temperatures. These records can be read by a smart phone using a patented visual light communications method.

